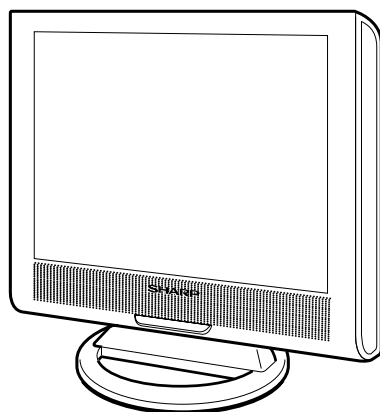


LOEWE.**SERVICE MANUAL**
LCD COLOUR TELEVISION
Art. Nr. 60415 A60
MODEL
FL38
(LC-15A2L)

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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Ersatzteilleiste für Artikel : 60415A60

SPARE PART LIST

Änderungen und Liefermöglichkeiten vorbehalten !

Loewe FL38

LOEWE.

POSNR. KURZTEXT
ITEMNMB DESCRIPTION

BESTELLNMR. ENTF-DAT.
LIST-PART-NMB LAST-DATE

BAUGRUPPEN

U 0001 FRONTEND LCD TV KPL. LOEWE
U 0002 HAUPTLEITERPLATTE
U 0003 BEDIENTEILPLATTE
U 0003 ANZEIGEPLATTE
U1001 SCART-ADAPTER KPL.
U1002 TUNER-ZF M MULTISYSTEM MN/BG-DK

DRUCKSACHEN

N 0001 BAN D-I FL38 LCD-TV E3001
N 0001 BAN NL-F FL38 LCD-TV E3001
N 0001 BAN GB-E FL38 LCD-TV E3001

GERÄTEBEIPACK

N 1002 NETZKABEL FL38
U 0004 NETZTEIL
U 9111 IR-FERNBEDIENUNG CONTROL 150 TV ARKTIS

VERPACKUNGSMATERIAL

J 0001 VERPACKUNGSKARTON
J 0002 PAPPEINLAGESATZ OBEN+UNTEN MIT POLSTER
J 0003 PAPPEINLAGESATZ SEITENTEILE
J 0004 PAPPEINLAGE 660 X 190 MM

KNÖPFE

2-3 BEDIENTASTENLEISTE
27 KNOPF EIN/AUS

GEHÄUSETEILE

1 FRONTRAHMEN KPL.
1-16 LAUTSPRECHER HT FRONT
1-2 LED-SCHACHT
1-3 ABDECKUNG LÄNGLICH SCHWARZ
1-4 IR-FILTER-FENSTER 12X8 MM
2 RUECKWAND KOMPLETT
3-1 ABDECKUNG SELBSTKLEBEND SCHW. SCHLITZ
3-2 SCHAUMGUMMI F. FUSSRING GEBOGEN 10 CM
3-3 BODENPLATTE FUSSRING
3-4 ABDECKUNG
G 0002 ABDECKUNG FUSS LCD

SPULEN/LAUTSPRECHER

2-13 LAUTSPRECHER TT RUECKWAND
T701 TRAFO
T751 TRAFO
T752 TRAFO

INTEGR.SCHALTUNGEN

I1001 ICMOS 4,50V 20MA SO08 RESET-IC LV030
I1002 ICMOS 24C32 LCD-TV PROGR. L100 LOEWE
I1003 ICMOS M27C2001-10 L3001 V1.0
I1003 ICMOS M27C2001-10 L3001 V1.1
I1003 ICMOS M27C2001-10 L3001 V1.2

UNITS

PRINT.CIRCUIT BOARD 396-88028050T
PRINT.CIRCUIT BOARD 396-90353980
PRINT.CIRCUIT BOARD 396-90353990
PRINT.CIRCUIT BOARD 396-90354910
PRINT.CIRCUIT BOARD 396-88038050
TUNER 260-87271050T

OPERATING INSTRUCTIONS

OPERATING INSTRUCT. 233-29035
OPERATING INSTRUCT. 233-29035010
OPERATING INSTRUCT. 233-29035020

SET SUPPLEMENT

POWER CORD 170-90354980
POWER PACK 815-90354990
TRANSMITTER 263-87000060

PACKING MATERIAL

PACKING CASE 245-90355900
CUSHION-SET 252-90355901
CUSHION-SET 252-90355902
CUSHION-SET 252-90355903

BUTTONS

BUTTON 682-90354976
BUTTON 682-90355907

CABINET MOUNTING

MASK 704-90354981
LOUDSPEAKER 272-90354973
COVER 568-90354978
MASK 703-90354983
WINDOW 666-90354977
BACKCOVER 775-90354982
COVER 568-90354986
COVER 568-90354987
BOTTOM COVER 777-90354988
COVER 568-90354985
STAND 484-88109001

COILS,SPEAKERS

LOUDSPEAKER 272-90354975
POWER TRANSFORMER 490-90354959
POWER TRANSFORMER 490-90354960
POWER TRANSFORMER 490-90354960

INTEGRATED CIRCUITS

INTEGRATED CIRCUIT 350-28570
INTEGRATED CIRCUIT 349-90578100
INTEGRATED CIRCUIT 349-28565438 25.10.2000
INTEGRATED CIRCUIT 349-28565443 08.11.2000
INTEGRATED CIRCUIT 349-28565451

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A60		BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
I1003	ICMOS M27C2001-10 L3001 V1.3		INTEGRATED CIRCUIT	349-28565460	
I1004	IC TEA5114A		INTEGRATED CIRCUIT	349-15212	
I1005	IC VOLT.REGULAT TO252 9V OA5 LV030		INTEGRATED CIRCUIT	350-29008	
I1006	ICMOS S-RAM W24257 AS-35 LV030		INTEGRATED CIRCUIT	350-28569	
I1008	ICMOS 74V1T00S SOT-23-5L NAND LV030		INTEGRATED CIRCUIT	350-28563	
I1009	IC ST92R195 QFP80 28844S LV030		INTEGRATED CIRCUIT	350-28844	
I1010	IC VOLT.REGULAT TO252 5V OA5 LV030		INTEGRATED CIRCUIT	350-29006	
I1011	IC VOLT.REGULAT TO252 10V OA5 LV030		INTEGRATED CIRCUIT	350-29007	
I1012	ICMOS 74 HCT125 SMD LV030		INTEGRATED CIRCUIT	350-15523	
I1013	IC TEA5114A		INTEGRATED CIRCUIT	349-15212	
I4500	IC TDA5637 SOT340		INTEGRATED CIRCUIT	350-27278	
I4600	IC TSA5523M SOT266		INTEGRATED CIRCUIT	350-27275	
I4800	IC TDA9818 SDIP24		INTEGRATED CIRCUIT	349-27276	
I4800	IC TDA9818 TS-SSOP24		INTEGRATED CIRCUIT	350-28463	
IC1101	ICMOS MB88346BPFV		INTEGRATED CIRCUIT	350-90354921	
IC1102	ICMOS NJM4565V		INTEGRATED CIRCUIT	350-90354922	
IC1103	ICMOS NJM4565V		INTEGRATED CIRCUIT	350-90354922	
IC1104	ICMOS NJM4565V		INTEGRATED CIRCUIT	350-90354922	
IC1105	ICMOS BU4053BCFV-E2		INTEGRATED CIRCUIT	350-90354923	
IC1106	ICMOS NJM4580V		INTEGRATED CIRCUIT	350-90354924	
IC1107	ICMOS NJM4580V		INTEGRATED CIRCUIT	350-90354924	
IC1108	ICMOS NJM4580V		INTEGRATED CIRCUIT	350-90354924	
IC1109	ICMOS NJM353M		INTEGRATED CIRCUIT	350-90354925	
IC1110	ICMOS BU4053BCFV-E2		INTEGRATED CIRCUIT	350-90354923	
IC1201	ICMOS LR38797		INTEGRATED CIRCUIT	350-90354926	
IC1202	ICMOS UPD485505G-25		INTEGRATED CIRCUIT	350-90354927	
IC2001	ICMOS RH-IX3483CEN1		INTEGRATED CIRCUIT	350-90354928	
IC2002	ICMOS PST529DMT		INTEGRATED CIRCUIT	350-90354929	
IC2003	ICMOS TC4W66F		INTEGRATED CIRCUIT	350-90354930	
IC2004	ICMOS BR24C08F-E2		INTEGRATED CIRCUIT	350-90354931	
IC2005	ICMOS BA7046F		INTEGRATED CIRCUIT	350-90354932	
IC201	ICMOS NJM2147M-TE1		INTEGRATED CIRCUIT	350-90354912	
IC301	IC LA4227		INTEGRATED CIRCUIT	349-90354911	
IC302	IC LA4227		INTEGRATED CIRCUIT	349-90354911	
IC303	ICMOS NJM2283M		INTEGRATED CIRCUIT	350-90354913	
IC402	ICMOS NJM2235M		INTEGRATED CIRCUIT	350-90354914	
IC701	ICMOS AN8005M		INTEGRATED CIRCUIT	350-90354915	
IC702	ICMOS NJM2377M		INTEGRATED CIRCUIT	350-90354916	
IC704	ICMOS BA033FP-E2		INTEGRATED CIRCUIT	350-90354917	
IC802	ICMOS VPC3230D-QA-B2		INTEGRATED CIRCUIT	350-90354918	
IC901	ICMOS MSP3410G-QA-B5		INTEGRATED CIRCUIT	350-90354919	
IC902	ICMOS NJM4560M		INTEGRATED CIRCUIT	350-90354920	
IC903	ICMOS NJM4560M		INTEGRATED CIRCUIT	350-90354920	
RMC4101	INFRAROT-EMPFAENGER		INTEGRATED CIRCUIT	349-90354972	
BUCHSEN/FASSUNGEN			SOCKETS		
H1002	IC-FASSUNG 8-POL.		SOCKET	320-80503	
H1003	IC-FASSUNG 32-POL.		SOCKET	320-22087	
W1001	SCARTBUCHSE		SOCKET	323-19542	
W1003	CHINCH-BUCHSE ROT 8MM GOLDPLATTIERT		SOCKET	323-29010	
W1004	MINI-DIN-BUCHSE 4-POL		SOCKET	323-18108	
W1005	CHINCH-BUCHSE WEISS 8MM GOLDPLATTIERT		SOCKET	323-29011	
W1006	CHINCH-BUCHSE GELB 8MM GOLDPLATTIERT		SOCKET	323-29009	
W1010	CHINCH-BUCHSE WEISS 8MM GOLDPLATTIERT		SOCKET	323-29011	
W1011	CHINCH-BUCHSE ROT 8MM GOLDPLATTIERT		SOCKET	323-29010	
W1016	KOPFHOERERBUCHSE 3,5MM		SOCKET	323-24591	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A60	BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
W1017	EINBAUBUCHSE 10-POL QUADRAT.	SOCKET	323-28932	
	DIODEN	DIODES		
D4203	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4204	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4222	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4241	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4242	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4303	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4304	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4322	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4341	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4403	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4422	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4441	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4508	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4527	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4551	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4806	DIODE BAV 99W SOT323	DIODE	351-27469	
	QUARZE/FILTER	QUARTZES		
X1001	QUARZ 4,000000 MHZ HC49U	CRYSTAL OSCILLATOR	385-17297Y06	
X2002	PIEZO	CERAMIC FILTER	386-90354954	
X4651	QUARZ 4,000000 MHZ HC49U3 LOW PROFILE	CRYSTAL OSCILLATOR	385-27752	
X4701	FILT. OFW K 6263 K	FILTER	290-25214	
X801	QUARZ SC0012CEZZ	CRYSTAL OSCILLATOR	385-90354952	
X901	QUARZ SB0250GEZZ	CRYSTAL OSCILLATOR	385-90354953	
	SCHALTER	SWITCHES		
S4701	SCHIEBESCHALTER	SWITCH	469-90354969	
SW4002	SCHALTER	SWITCH	467-90354968	
SW4003	SCHALTER	SWITCH	467-90354968	
SW4004	SCHALTER	SWITCH	467-90354968	
SW4006	SCHALTER	SWITCH	467-90354968	
SW4007	SCHALTER	SWITCH	467-90354968	
SW4008	SCHALTER	SWITCH	467-90354968	
	SICHERUNGEN	FUSES		
F1001	SICH. 2000MA T 250V 8X8 LV380-3	FUSE	380-16779020	
F1002	SICH. 1600MA T 250V 8X8 LV380-3	FUSE	380-16913020	
F1003	SICH. 1600MA T 250V 8X8 LV380-3	FUSE	380-16913020	
F1004	SICH. 315MA T 250V 8X8 LV380-3	FUSE	380-10558020	
	SMD TEILE	SMD PARTS		
D1001	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6 LV030	DIODE	351-16758	
D1002	DIOZD 5V6 G 0W5 SOD-80 ZMM5.6 LV030	DIODE	351-22580	
D1003	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	
D1004	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	
D1005	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	
D1006	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	
D1007	DIOZD 5V6 G 0W5 SOD-80 ZMM5.6 LV030	DIODE	351-22580	
D1008	DIOZD 5V6 G 0W5 SOD-80 ZMM5.6 LV030	DIODE	351-22580	
D1009	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6 LV030	DIODE	351-16758	
D1010	DIODE 0,2A 75V SOD80 LL4148 LV030	DIODE	351-15015	
D1011	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	
D1012	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	
D1013	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030	DIODE	351-17532	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A60	BESTELLN. LIST-PART-NMB	ENTF-DAT. LAST-DATE
D1101	DIODE 1SS250-1E		351-90354948	
D1201	DIODE DAN222-1		351-90354946	
D1202	DIODE ZD EX0227CEZZ		351-90354951	
D201	DIODE DAN222-1		351-90354946	
D4009	DIODE ZD EX0879CEZZ		351-90354966	
D4010	DIODE ZD EX0879CEZZ		351-90354966	
D4018	DIODE ZD EX1283CEZZ		351-90354967	
D4019	DIODE ZD EX1283CEZZ		351-90354967	
D4120	DIODE ZD EX1271CEZZ		351-90354971	
D4121	DIODE ZD EX1271CEZZ		351-90354971	
D4702	DIODE BA 592 SOD323		351-25810	
D4703	DIODE BA 592 SOD323		351-25810	
D4751	DIODE BA 592 SOD323		351-25810	
D4752	DIODE BA 592 SOD323		351-25810	
D4771	DIODE BA 592 SOD323		351-25810	
D4772	DIODE BA 592 SOD323		351-25810	
D4781	DIODE BA 592 SOD323		351-25810	
D4832	DIODE BA 592 SOD323		351-25810	
D702	DIODE SFPB56-2E		351-90354947	
D703	DIODE 1SS250-1E		351-90354948	
D704	DIODE 1SS250-1E		351-90354948	
D705	DIODE DAN222-1		351-90354946	
D706	DIODE SFPB74-2E		351-90354949	
D707	DIODE DAN222-1		351-90354946	
D709	DIODE DAN222-1		351-90354946	
D710	DIODE DAN222-1		351-90354946	
D712	DIODE DAN222-1		351-90354946	
D753	DIODE IMN10-1		351-90354950	
D754	DIODE IMN10-1		351-90354950	
Q1001	TRANS BC847BW SOT323		344-27272	
Q1003	TRANS BC847BW SOT323		344-27272	
Q1004	TRANS BC847BW SOT323		344-27272	
Q1005	TRANS BC847BW SOT323		344-27272	
Q1006	TRANS BC847BW SOT323		344-27272	
Q1007	TRANS BC847BW SOT323		344-27272	
Q1008	TRANS BC847BW SOT323		344-27272	
Q1009	TRANS BC847BW SOT323		344-27272	
Q1010	TRANS BC857BW SOT323	LV030	344-28404	
Q1011	TRANS BC857BW SOT323	LV030	344-28404	
Q1012	TRANS BC857BW SOT323	LV030	344-28404	
Q1013	TRANS BC847B SOT23		344-14974	
Q1014	TRANS BC857B SOT23		344-14979	
Q1015	TRANS BC847BW SOT323		344-27272	
Q1016	TRANS BC847BW SOT323		344-27272	
Q1017	TRANS BC847BW SOT323		344-27272	
Q1018	TRANS BC847BW SOT323		344-27272	
Q1019	TRANS BC857BW SOT323	LV030	344-28404	
Q1020	TRANS BC847BW SOT323		344-27272	
Q1021	TRANS BC857BW SOT323	LV030	344-28404	
Q1022	TRANS BC857BW SOT323	LV030	344-28404	
Q1023	TRANS BC857BW SOT323	LV030	344-28404	
Q1024	TRANS BC847B SOT23		344-14974	
Q1025	TRANS BC847B SOT23		344-14974	
Q1026	TRANS BC847B SOT23		344-14974	
Q1027	TRANS BC857BW SOT323	LV030	344-28404	
Q1028	TRANS BC847BW SOT323		344-27272	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A60		BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
Q1029	TRANS BCX69-25		TRANSISTOR	344-24714	
Q1030	TRANS BF 840 SMD		TRANSISTOR	344-28018	
Q1031	TRANS BF550 SOT23		TRANSISTOR	344-23563	
Q1032	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1033	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1101	TRANS 2SA1729-1		TRANSISTOR	344-90354943	
Q1102	TRANS 2SC4520-1		TRANSISTOR	344-90354944	
Q1201	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q2003	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q2004	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q2005	TRANS DTA144EE-1		TRANSISTOR	344-90354945	
Q2006	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q201	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q202	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q203	TRANS FMY3////-1		TRANSISTOR	344-90354934	
Q204	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q302	TRANS 2SA1162Y-1		TRANSISTOR	344-90354935	
Q303	TRANS DTC314TK-1		TRANSISTOR	344-90354936	
Q304	TRANS DTC314TK-1		TRANSISTOR	344-90354936	
Q305	TRANS DTC314TK-1		TRANSISTOR	344-90354936	
Q308	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q4106	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q4107	TRANSISTOR UMG4////-1		TRANSISTOR	344-90354970	
Q4702	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+		TRANSISTOR	344-27270	
Q4709	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+		TRANSISTOR	344-27270	
Q4752	TRANS DIGITAL SOT323 NPN 50V 100MA 47K		TRANSISTOR	344-28555	31.12.1999
Q4754	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+		TRANSISTOR	344-27270	
Q4772	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+		TRANSISTOR	344-27270	
Q4772	TRANS DIGITAL SOT323 NPN 50V 100MA 47K		TRANSISTOR	344-28555	
Q4774	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+		TRANSISTOR	344-27270	
Q4804	TRANS BC857W SOT323		TRANSISTOR	344-27468	
Q4804	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q4832	TRANS BCR198W SOT323 PNP		TRANSISTOR	344-27269	
Q4833	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q701	TRANS 2SA1162Y-1		TRANSISTOR	344-90354935	
Q702	TRANS 2SK2503-1		TRANSISTOR	344-90354938	
Q703	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q707	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q708	TRANS FMMT718-1		TRANSISTOR	344-90354939	
Q709	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q710	TRANS 2SA1162Y-1		TRANSISTOR	344-90354935	
Q751	TRANS FZT1053A-1		TRANSISTOR	344-90354940	
Q752	TRANS FZT1053A-1		TRANSISTOR	344-90354940	
Q753	TRANS 2SA1162Y-1		TRANSISTOR	344-90354935	
Q754	TRANS DTC114YE-1		TRANSISTOR	344-90354941	
Q757	TRANS UPA606T-1		TRANSISTOR	344-90354942	
SPEZIALTEILE			SPECIAL PARTS		
10	FILT. OFW K 9463 M		FILTER	290-25323	
20	DECKEL		LID	501-87236011	
21	DECKEL		LID	501-87236011	
21	KABLBAUM DISPLAY		CONNECTING CABLE	171-90355905	
2-12	SCHAUMGUMMI		FRAME	549-90354989	
22	15" LCD-PANEL		PICTURE TUBE	345-90354999	
2-2	RUECKWANDAUFKLEBER		FRAME	549-90354979	
25	TYPENSCHILD		INDICATING UNIT	663-90354991	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A60		BESTELLN. LIST-PART-NMB	ENTF-DAT. LAST-DATE
26	BUCHSEN/KABELABDECKUNG F.RUECKWAND		COVER	568-90355906	
36	KABELBAUM 4-POL.		CONNECTING CABLE	171-90354995	
37	KABELBAUM 20-POL.		CONNECTING CABLE	171-90354997	
38	KABELBAUM 50-POL.		CONNECTING CABLE	171-90354994	
39	KABELBAUM 5-POL.		CONNECTING CABLE	171-90354993	
4	LAMPEN-SET		INCANDESCENT LAMP	383-90354998	
40	KABELBAUM 11-POL.		CONNECTING CABLE	171-90354992	
FB1202	SPULE		CHOKE	296-90354964	
FB1203	SPULE		CHOKE	296-90354965	
FB702	SPULE		CHOKE	296-90354961	
FB703	SPULE		CHOKE	296-90354961	
FB704	SPULE		CHOKE	296-90354961	
FB705	SPULE		CHOKE	296-90354962	
FB706	SPULE		CHOKE	296-90354961	
FB708	SPULE		CHOKE	296-90354962	
FB709	SPULE		CHOKE	296-90354963	
L4192	LUFTSPULE		COIL	297-27573	18.07.2000
L4192	SPULE		COIL	297-27573001	15.01.1999
L4192	DR. 270N J 0603 SMD LV030 +		CHOKE	296-28579	
L4193	LUFTSPULE		COIL	297-27571	
L4201	LUFTSPULE		COIL	297-27571	
L4201	SPULE		COIL	297-27571001	
L4202	LUFTSPULE		COIL	297-28046	21.09.2000
L4202	DR-CH 330N0 J 0805 LL2012 LV030		CHOKE	296-29271	
L4231	SPULE		COIL	297-27569001	
L4232	SPULE		COIL	297-27569001	
L4233	SPULE		COIL	297-27561001	
L4301	SPULE		COIL	297-27562001	
L4301	SPULE		COIL	297-27566001	02.05.2001
L4302	SPULE		COIL	297-27561001	02.05.2001
L4302	DR-CH 27N0 K 0805 LQN21A LV030		CHOKE	296-29269	09.05.2001
L4303	DR-CH 27N0 K 0805 LQN21A LV030		CHOKE	296-29269	
L4311	LUFTSPULE		COIL	297-27571	
L4331	SPULE		COIL	297-27561001	
L4332	SPULE		COIL	297-27683001	
L4342	SPULE		COIL	297-27553001	02.05.2001
L4342	DR-CH 15N0 K 0805 LQN21A LV030		CHOKE	296-29270	09.05.2001
L4343	DR-CH 15N0 K 0805 LQN21A LV030		CHOKE	296-29270	
L4351	DR. 68N J 0805 800M-Q30 LV030		CHOKE	296-28465	
L4352	DR. 68N J 0805 800M-Q30 LV030		CHOKE	296-28465	
L4401	SPULE		COIL	297-27562001	
L4402	SPULE		COIL	297-27553001	
L4411	SPULE		COIL	297-27568001	
L4422	SPULE		COIL	297-27559001	
L4431	SPULE LV297-27546		COIL	297-27546001	
L4432	SPULE		COIL	297-27683001	
L4441	SPULE		COIL	297-27561001	02.05.2001
L4441	DR-CH 27N0 K 0805 LQN21A LV030		CHOKE	296-29269	09.05.2001
L4442	SPULE		COIL	297-27683001	02.05.2001
L4442	DR-CH 15N0 K 0805 LQN21A LV030		CHOKE	296-29270	09.05.2001
L4443	DR-CH 27N0 K 0805 LQN21A LV030		CHOKE	296-29269	
L4444	DR-CH 15N0 K 0805 LQN21A LV030		CHOKE	296-29270	
L4451	DR. 12N K 0805 800M-Q45 LV030		CHOKE	296-28466	
L4452	DR. 12N K 0805 800M-Q45 LV030		CHOKE	296-28466	
L4503	SPULE		COIL	297-27564001	
L4523	SPULE		COIL	297-27552001	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A60	BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
L4543	SPULE	COIL	297-27548001	
L4546	SPULE	COIL	297-27559001	
L4701	DR-RA 0U68 K 4X3X4 5R0 LV298-21/020	CHOKE	298-27591020	
L4816	SPULE LV297-27743	COIL	297-27743	
L4831	DR-RA 6U8 J 4X3X4 5R0 LV298-21/020	CHOKE	298-27588020	
L701	SPULE	CHOKE	296-90354955	
L705	SPULE	CHOKE	296-90354956	
L706	SPULE	CHOKE	296-90354955	
L751	SPULE	CHOKE	296-90354957	
L752	SPULE	CHOKE	296-90354957	
L804	SPULE	CHOKE	296-90354958	
L805	SPULE	CHOKE	296-90354958	
P4821	POT 10K 6MM KOHLESCHICHT HORIZONT.	POTENTIOMETER	375-27744	
Q4210	TRANS BF1100WR SOT343 +	TRANSISTOR	344-27268	
Q4310	TRANS BF1100WR SOT343 +	TRANSISTOR	344-27268	
Q4410	TRANS BF1100WR SOT343 +	TRANSISTOR	344-27268	
Q4836	TRANS BC847B SOT23	TRANSISTOR	344-14974	
Q4853	TRANS BC847BW SOT323	TRANSISTOR	344-27272	
W1001	FOLIENSTECKVERB. 20-POL RM0,5	CONTACT LEDGE	326-28933	
W1002	STIFTLEISTE 7-POL NATUR LV326-11	CONTACT LEDGE	326-20908	
W1002	KONTAKTLEISTE 21POL RM2,54 LV326-27320	CONTACT LEDGE	326-27320021	
W1007	BUCHSENLEISTE 5POL RM5,08 LV326-28942	CONTACT LEDGE	326-28942005	
W1008	FLACHSTECKER,GEBOGEN" UG 2 " LV	PLUG	321-82232001	
W1009	FOLIENSTECKVERB. 50-POL RM0,5	CONTACT LEDGE	326-28934	
W1012	FLACHSTECKER,GEBOGEN" UG 2 " LV	PLUG	321-82232001	
W1013	STIFTLEISTE 11-POL NATUR RM2,0 SYST.-PH	CONTACT LEDGE	326-28935	
W1014	BUCHSENLEISTE 6POL RM5,08 LV326-28942	CONTACT LEDGE	326-28942006	
W1015	FLACHSTECKER,GEBOGEN" UG 2 " LV	PLUG	321-82232001	
W1018	FLACHSTECKER,GEBOGEN" UG 2 " LV	PLUG	321-82232001	
W4100	KOAX-BUCHSE	SOCKET	323-27599	
W4200	KONTAKTLEISTE 6POL RM5,08 LV326-27320	CONTACT LEDGE	326-27320016	
W4800	KONTAKTLEISTE 4POL RM5,08 LV326-27320	CONTACT LEDGE	326-27320014	
W4800	KONTAKTLEISTE 5POL RM5,08 LV326-27320	CONTACT LEDGE	326-27320015	26.01.2001
X4651	QUARZ 4,000000 MHZ HC49U3 LOW PROFILE	CRYSTAL OSCILLATOR	385-27752	
X4701	FILT. OFW K 6263 K	FILTER	290-25214	
X4751	FILT. OFW K 9463-M	FILTER	290-25323Y20	
X4771	FILT. OFW K 9461-M	FILTER	290-25216Y20	
X4831	PIEZO FILTER 5,5MHZ/5,742MHZ LV020	CERAMIC FILTER	386-27630020	
X4832	PIEZO FILTER 4,5 MHZ LV020	CERAMIC FILTER	386-27305020	

Ersatzteileliste für Artikel : 60415A70

SPARE PART LIST

Änderungen und Liefermöglichkeiten vorbehalten !

FL38 platin VAR.70

LOEWE.

POSNR. KURZTEXT
ITEMNMB DESCRIPTION

BESTELLNR. ENTF-DAT.
LIST-PART-NMB LAST-DATE

BAUGRUPPEN

U 0001 FRONTEND LCD TV KPL. LOEWE
U 0002 HAUPTLEITERPLATTE
U 0003 BEDIENTEILPLATTE
U 0003 ANZEIGEPLATTE
U1001 SCART-ADAPTER KPL.
U1002 TUNER-ZF M MULTISYSTEM MN/BG-DK

DRUCKSACHEN

N 0001 BAN D-I FL38 LCD-TV E3001
N 0001 BAN NL-F FL38 LCD-TV E3001
N 0001 BAN GB-E FL38 LCD-TV E3001

GERÄTEBEIPACK

N 1002 NETZKABEL FL38
U 0004 NETZTEIL
U 9111 IR-FERNBEDIENUNG CONTROL 150 TV ARKTIS

VERPACKUNGSMATERIAL

J 0001 VERPACKUNGSKARTON
J 0002 PAPPEINLAGESATZ OBEN+UNTEN MIT POLSTER
J 0003 PAPPEINLAGESATZ SEITENTEILE
J 0004 PAPPEINLAGE 660 X 190 MM

KNÖPFE

2-3 BEDIENTASTENLEISTE
27 KNOPF EIN/AUS

GEHÄUSETEILE

1 FRONTRAHMEN KPL.
1-2 LED-SCHACHT
1-3 ABDECKUNG LÄNGLICH SCHWARZ
1-4 IR-FILTER-FENSTER 12X8 MM
2 RUECKWAND KOMPLETT
22 LCD-PANEL
26 BUCHSEN/KABELABDECKUNG F.RUECKWAND
3-4 ABDECKUNG
G 0002 ABDECKUNG FUSS LCD

SPULEN/LAUTSPRECHER

1-16 LAUTSPRECHER HT FRONT
2-13 LAUTSPRECHER TT RUECKWAND
T701 TRAFO
T751 TRAFO
T752 TRAFO

INTEGR.SCHALTUNGEN

I 0101 ICMOS PCA84C122AT-216
I 0101 ICMOS PCA84C122AT-231
I1001 ICMOS 4,50V 20MA SO08 RESET-IC LV030
I1002 ICMOS 24C32 LCD-TV PROGR. L100 LOEWE
I1003 ICMOS M27C2001-10 L3001 V1.0
I1003 ICMOS M27C2001-10 L3001 V1.1

UNITS

PRINT.CIRCUIT BOARD 396-88028050T
PRINT.CIRCUIT BOARD 396-90414955T
PRINT.CIRCUIT BOARD 396-90353990
PRINT.CIRCUIT BOARD 396-90354910
PRINT.CIRCUIT BOARD 396-88038050
TUNER 260-87271050T

OPERATING INSTRUCTIONS

OPERATING INSTRUCT. 233-29035
OPERATING INSTRUCT. 233-29035010
OPERATING INSTRUCT. 233-29035020

SET SUPPLEMENT

POWER CORD 170-90354980
POWER PACK 815-90354990
TRANSMITTER 263-87000060

PACKING MATERIAL

PACKING CASE 245-90355900
CUSHION-SET 252-90355901
CUSHION-SET 252-90355902
CUSHION-SET 252-90355903

BUTTONS

BUTTON 682-90354976
BUTTON 682-90355907

CABINET MOUNTING

MASK 704-90354981
COVER 568-90354978
MASK 703-90354983
WINDOW 666-90354977
BACKCOVER 775-90414948
PICTURE TUBE 345-90414946
COVER 568-90355906
COVER 568-90354985
STAND 484-88109001

COILS,SPEAKERS

LOUDSPEAKER 272-90354973
LOUDSPEAKER 272-90354975
POWER TRANSFORMER 490-90414945
POWER TRANSFORMER 490-90354960
POWER TRANSFORMER 490-90354960

INTEGRATED CIRCUITS

INTEGRATED CIRCUIT 350-27026
INTEGRATED CIRCUIT 350-27787
INTEGRATED CIRCUIT 350-28570
INTEGRATED CIRCUIT 349-90578100
INTEGRATED CIRCUIT 349-28565438 25.10.2000
INTEGRATED CIRCUIT 349-28565443 08.11.2000

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70	BESTELLN. LIST-PART-NMB	ENTF-DAT. LAST-DATE
I1003	ICMOS M27C2001-10 L3001 V1.2	INTEGRATED CIRCUIT	349-28565451	
I1003	ICMOS M27C2001-10 L3001 V1.3	INTEGRATED CIRCUIT	349-28565460	
I1004	IC TEA5114A	INTEGRATED CIRCUIT	349-15212	
I1005	IC VOLT.REGULAT TO252 9V OA5 LV030	INTEGRATED CIRCUIT	350-29008	
I1006	ICMOS W24257# SOP20 55N S-RAM LV030	INTEGRATED CIRCUIT	350-28569	
I1008	ICMOS 74V1T00S SOT-23-5L NAND LV030	INTEGRATED CIRCUIT	350-28563	
I1009	IC ST92R195 QFP80 28844S LV030	INTEGRATED CIRCUIT	350-28844	
I1010	IC VOLT.REGULAT TO252 5V OA5 LV030	INTEGRATED CIRCUIT	350-29006	
I1011	IC VOLT.REGULAT TO252 10V OA5 LV030	INTEGRATED CIRCUIT	350-29007	
I1012	ICMOS 74 HCT125 SMD LV030	INTEGRATED CIRCUIT	350-15523	
I1013	IC TEA5114A	INTEGRATED CIRCUIT	349-15212	
I4500	IC TDA5637 SOT340	INTEGRATED CIRCUIT	350-27278	
I4600	IC TSA5523M SOT266	INTEGRATED CIRCUIT	350-27275	
I4800	IC TDA9818 SDIP24	INTEGRATED CIRCUIT	349-27276	
I4800	IC TDA9818 TS-SSOP24	INTEGRATED CIRCUIT	350-28463	
IC1101	ICMOS MB88346BPFV	INTEGRATED CIRCUIT	350-90354921	
IC1102	ICMOS NJM4565V	INTEGRATED CIRCUIT	350-90354922	
IC1103	ICMOS NJM4565V	INTEGRATED CIRCUIT	350-90354922	
IC1104	ICMOS NJM4565V	INTEGRATED CIRCUIT	350-90354922	
IC1105	ICMOS BU4053BCFV-E2	INTEGRATED CIRCUIT	350-90354923	
IC1106	ICMOS NJM4580V	INTEGRATED CIRCUIT	350-90354924	
IC1107	ICMOS NJM4580V	INTEGRATED CIRCUIT	350-90354924	
IC1108	ICMOS NJM4580V	INTEGRATED CIRCUIT	350-90354924	
IC1109	ICMOS NJM353M	INTEGRATED CIRCUIT	350-90354925	
IC1110	ICMOS BU4053BCFV-E2	INTEGRATED CIRCUIT	350-90354923	
IC1201	ICMOS LR38797	INTEGRATED CIRCUIT	350-90354926	
IC1202	ICMOS UPD485505G-25	INTEGRATED CIRCUIT	350-90354927	
IC1203	VHITC4W53U/-1	INTEGRATED CIRCUIT	350-90414950	
IC1204	VHITC4024BF-1	INTEGRATED CIRCUIT	350-90414951	
IC1205	VHITC4052BF1E	INTEGRATED CIRCUIT	350-90414952	
IC2001	ICMOS RH-IX3483CEN1	INTEGRATED CIRCUIT	350-90354928	
IC2002	ICMOS PST529DMT	INTEGRATED CIRCUIT	350-90354929	
IC2003	ICMOS TC4W66F	INTEGRATED CIRCUIT	350-90354930	
IC2004	ICMOS BR24C08F-E2	INTEGRATED CIRCUIT	350-90354931	
IC2005	ICMOS BA7046F	INTEGRATED CIRCUIT	350-90354932	
IC201	ICMOS NJM2147M-TE1	INTEGRATED CIRCUIT	350-90354912	
IC301	IC LA4227	INTEGRATED CIRCUIT	349-90354911	
IC302	IC LA4227	INTEGRATED CIRCUIT	349-90354911	
IC303	ICMOS NJM2283M	INTEGRATED CIRCUIT	350-90354913	
IC402	ICMOS NJM2235M	INTEGRATED CIRCUIT	350-90354914	
IC701	ICMOS AN8005M	INTEGRATED CIRCUIT	350-90354915	
IC702	ICMOS NJM2377M	INTEGRATED CIRCUIT	350-90354916	
IC704	ICMOS BA033FP-E2	INTEGRATED CIRCUIT	350-90354917	
IC802	ICMOS VPC3230D-QA-B2	INTEGRATED CIRCUIT	350-90354918	
IC901	ICMOS MSP3410G-QA-B5	INTEGRATED CIRCUIT	350-90354919	
IC902	ICMOS NJM4560M	INTEGRATED CIRCUIT	350-90354920	
IC903	ICMOS NJM4560M	INTEGRATED CIRCUIT	350-90354920	
RMC4101	INFRAROT-EMPFAENGER	INTEGRATED CIRCUIT	349-90354972	
BUCHSEN/FASSUNGEN		SOCKETS		
H1002	IC-FASSUNG 8-POL.	SOCKET	320-80503	
H1003	IC-FASSUNG 32-POL.	SOCKET	320-22087	
W1001	SCARTBUCHSE	SOCKET	323-19542	
W1003	CHINCH-BUCHSE ROT 8MM GOLDPLATTIERT	SOCKET	323-29010	
W1004	MINI-DIN-BUCHSE 4-POL	SOCKET	323-18108	
W1005	CHINCH-BUCHSE WEISS 8MM GOLDPLATTIERT	SOCKET	323-29011	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70	BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
W1006	CHINCH-BUCHSE GELB 8MM GOLDPLATTIERT	SOCKET	323-29009	
W1010	CHINCH-BUCHSE WEISS 8MM GOLDPLATTIERT	SOCKET	323-29011	
W1011	CHINCH-BUCHSE ROT 8MM GOLDPLATTIERT	SOCKET	323-29010	
W1016	KOPFHOERERBUCHSE 3,5MM HORIZ.	SOCKET	323-24591	
W1017	EINBAUBUCHSE 10-POL QUADRAT.	SOCKET	323-28932	
DIODEN		DIODES		
D 0117	LED LG T679 SMD	COUPLER	353-27021	
D 0118	LED LG T679 SMD	COUPLER	353-27021	
D 0121	DIODE LED F.D.SFH 4515	COUPLER	353-27024	
D4203	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4204	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4222	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4241	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4242	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4303	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4304	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4322	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4341	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4403	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4422	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4441	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4508	DIOVC 0A02 30V SOD323 BB640 LV030	DIODE	351-26568	
D4527	DIOVC 0A02 30V SOD323 BB639 LV030	DIODE	351-26571	
D4551	DIOVC 0A02 30V SOD323 BB535 LV030	DIODE	351-26570	
D4806	DIODE BAV 99W SOT323	DIODE	351-27469	
QUARZE/FILTER		QUARTZES		
X1001	QUARZ 4,000000 MHZ HC49U	CRYSTAL OSCILLATOR	385-17297Y06	
X2002	PIEZO	CERAMIC FILTER	386-90354954	
X4651	QUARZ 4,000000 MHZ HC49U3 LOW PROFILE	CRYSTAL OSCILLATOR	385-27752	
X4701	FILT. OFW K 6263 K	FILTER	290-25214	
X801	QUARZ SC0012CEZZ	CRYSTAL OSCILLATOR	385-90354952	
X901	QUARZ SB0250GEZZ	CRYSTAL OSCILLATOR	385-90354953	
SCHALTER		SWITCHES		
S4701	SCHIEBESCHALTER	SWITCH	469-90354969	
SW4002	SCHALTER	SWITCH	467-90354968	
SW4003	SCHALTER	SWITCH	467-90354968	
SW4004	SCHALTER	SWITCH	467-90354968	
SW4006	SCHALTER	SWITCH	467-90354968	
SW4007	SCHALTER	SWITCH	467-90354968	
SW4008	SCHALTER	SWITCH	467-90354968	
SICHERUNGEN		FUSES		
F1001	SICH. 2000MA T 250V 8X8 LV380-3	FUSE	380-16779020	
F1002	SICH. 1600MA T 250V 8X8 LV380-3	FUSE	380-16913020	
F1003	SICH. 1600MA T 250V 8X8 LV380-3	FUSE	380-16913020	
F1004	SICH. 315MA T 250V 8X8 LV380-3	FUSE	380-10558020	
GEBER-ERSATZTEILE		SPARE PARTS FOR TRANSMITTER		
20	BATTERIEFEDER	SPRING	739-87217001	
20	GEHAEUSE-OBERTEIL CONTROL 150 ARKTIS	COVER	756-87265001	
25	LICHTLEITER	WINDOW	666-87274001	
30	KONTAKTMATTE CONTROL 150	SPRING CONTACT	309-87267001	
70	GEHAEUSE-UNTERTEIL ARKTIS	COVER	756-87264001	
80	BATTERIEFEDER 2-FACH	SPRING	739-85279001	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70		BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
90	BATTERIEDECKEL ARKTIS		COVER	756-87215001	
20	BATTERIEFEDER VERGOLDET		SPRING	739-87217002	
D 104	DIODE BAS216 SOD110		DIODE	351-27279	
D 105	DIODE BAS216 SOD110		DIODE	351-27279	13.03.2002
D 117	LED LG T679 SMD		COUPLER	353-27021	
D 118	LED LG T679 SMD		COUPLER	353-27021	
D 121	DIODE LED F.D.SFH 4515		COUPLER	353-27024	
G 0000	BATTERIEDECKEL ARKTIS		COVER	756-87215001	
G 0000	GEHAEUSE-UNTERTEIL ARKTIS		COVER	756-87264001	
G 0000	GEHAEUSE-OBERTEIL CONTROL 150 ARKTIS		COVER	756-87265001	
G 0000	LICHTLEITER		WINDOW	666-87274001	
H 0000	BATTERIEFEDER 2-FACH		SPRING	739-85279001	
H 0000	BATTERIEFEDER		SPRING	739-87217001	
I 101	ICMOS PCA84C122AT-231		INTEGRATED CIRCUIT	350-27787	13.03.2002
I 101	ICMOS HT48CA6 24SOP M-CONTR. V1.0 LV030		INTEGRATED CIRCUIT	350-29859001	
Q 0121	TRANS GENERAL SOT23 PNP 45V 500MA		TRANSISTOR	344-25509	
Q 121	TRANS GENERAL SOT23 PNP 45V 500MA		TRANSISTOR	344-25509	13.03.2002
Q 122	TRANS GENERAL SOT23 PNP 45V 500MA		TRANSISTOR	344-25509	
S 0000	KONTAKTMATTE CONTROL 150		SPRING CONTACT	309-87267001	
X 0111	PIEZO 4,300000 MHZ MELF RESON LV030		CERAMIC FILTER	386-27022	
X 111	PIEZO 4,300000 MHZ MELF RESON LV030		CERAMIC FILTER	386-27022	13.03.2002
X 111	RESON 3,580000 MHZ SMD MIT KOND.		CERAMIC FILTER	386-29931	
SMD TEILE			SMD PARTS		
D 0105	DIODE BAS216 SOD110		DIODE	351-27279	
D1001	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6 LV030		DIODE	351-16758	
D1002	DIOZD 5V6 G 0W5 SOD-80 ZMM5.6 LV030		DIODE	351-22580	
D1003	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1004	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1005	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1006	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1007	DIOZD 5V6 G 0W5 SOD-80 ZMM5.6 LV030		DIODE	351-22580	
D1008	DIOZD 5V6 G 0W5 SOD-80 ZMM5.6 LV030		DIODE	351-22580	
D1009	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6 LV030		DIODE	351-16758	
D1010	DIODE 0,2A 75V SOD80 LL4148 LV030		DIODE	351-15015	
D1011	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1012	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1013	DIOZD 12V0 J 0W5 SOD-80 ZMM12 LV030		DIODE	351-17532	
D1101	DIODE 1SS250-1E		DIODE	351-90354948	
D1102	DIODE DAN222-1		DIODE	351-90354946	
D1201	DIODE DAN222-1		DIODE	351-90354946	
D1202	DIODE ZD EX0227CEZZ		DIODE	351-90354951	
D201	DIODE DAN222-1		DIODE	351-90354946	
D4009	DIODE ZD EX0879CEZZ		DIODE	351-90354966	
D4010	DIODE ZD EX0879CEZZ		DIODE	351-90354966	
D4018	DIODE ZD EX1283CEZZ		DIODE	351-90354967	
D4019	DIODE ZD EX1283CEZZ		DIODE	351-90354967	
D4120	DIODE ZD EX1271CEZZ		DIODE	351-90354971	
D4121	DIODE ZD EX1271CEZZ		DIODE	351-90354971	
D4702	DIODE BA 592 SOD323		DIODE	351-25810	
D4703	DIODE BA 592 SOD323		DIODE	351-25810	
D4751	DIODE BA 592 SOD323		DIODE	351-25810	
D4752	DIODE BA 592 SOD323		DIODE	351-25810	
D4771	DIODE BA 592 SOD323		DIODE	351-25810	
D4772	DIODE BA 592 SOD323		DIODE	351-25810	
D4781	DIODE BA 592 SOD323		DIODE	351-25810	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70		BESTELLN. LIST-PART-NMB	ENTF-DAT. LAST-DATE
D4832	DIODE BA 592 SOD323		DIODE	351-25810	
D702	DIODE SFPB56-2E		DIODE	351-90354947	
D703	DIODE 1SS250-1E		DIODE	351-90354948	
D704	DIODE 1SS250-1E		DIODE	351-90354948	
D705	DIODE DAN222-1		DIODE	351-90354946	
D706	DIODE SFPB74-2E		DIODE	351-90354949	
D707	DIODE DAN222-1		DIODE	351-90354946	
D709	DIODE DAN222-1		DIODE	351-90354946	
D710	DIODE DAN222-1		DIODE	351-90354946	
D712	DIODE DAN222-1		DIODE	351-90354946	
D753	DIODE IMN10-1		DIODE	351-90354950	
D754	DIODE IMN10-1		DIODE	351-90354950	
Q1001	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1003	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1004	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1005	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1006	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1007	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1008	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1009	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1010	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1011	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1012	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1013	TRANS BC847B SOT23		TRANSISTOR	344-14974	
Q1014	TRANS BC857B SOT23		TRANSISTOR	344-14979	
Q1015	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1016	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1017	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1018	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1019	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1020	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1021	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1022	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1023	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1024	TRANS BC847B SOT23		TRANSISTOR	344-14974	
Q1025	TRANS BC847B SOT23		TRANSISTOR	344-14974	
Q1026	TRANS BC847B SOT23		TRANSISTOR	344-14974	
Q1027	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1028	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1029	TRANS BCX69-25		TRANSISTOR	344-24714	
Q1030	TRANS BF 840 SMD		TRANSISTOR	344-28018	
Q1031	TRANS BF550 SOT23		TRANSISTOR	344-23563	
Q1032	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
Q1033	TRANS BC857BW SOT323	LV030	TRANSISTOR	344-28404	
Q1101	TRANS 2SA1729-1		TRANSISTOR	344-90354943	
Q1102	TRANS 2SC4520-1		TRANSISTOR	344-90354944	
Q1201	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q1202	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q2003	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q2004	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q2005	TRANS DTA144EE-1		TRANSISTOR	344-90354945	
Q2006	TRANS DTC144EE-1		TRANSISTOR	344-90354937	
Q201	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q202	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	
Q203	TRANS FMY3////-1		TRANSISTOR	344-90354934	
Q204	TRANS 2SC2712Y-1		TRANSISTOR	344-90354933	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70	BESTELLN. LIST-PART-NMB	ENTF-DAT. LAST-DATE
Q302	TRANS 2SA1162Y-1	TRANSISTOR	344-90354935	
Q303	TRANS DTC314TK-1	TRANSISTOR	344-90354936	
Q304	TRANS DTC314TK-1	TRANSISTOR	344-90354936	
Q305	TRANS DTC314TK-1	TRANSISTOR	344-90354936	
Q308	TRANS DTC144EE-1	TRANSISTOR	344-90354937	
Q4106	TRANS DTC144EE-1	TRANSISTOR	344-90354937	
Q4107	TRANSISTOR UMG4/////1	TRANSISTOR	344-90354970	
Q4702	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+	TRANSISTOR	344-27270	
Q4709	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+	TRANSISTOR	344-27270	
Q4752	TRANS DIGITAL SOT323 NPN 50V 100MA 47K	TRANSISTOR	344-28555	31.12.1999
Q4754	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+	TRANSISTOR	344-27270	
Q4772	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+	TRANSISTOR	344-27270	
Q4772	TRANS DIGITAL SOT323 NPN 50V 100MA 47K	TRANSISTOR	344-28555	
Q4774	TRANS DIGITAL SOT323 NPN 50V 70MA 47K+	TRANSISTOR	344-27270	
Q4804	TRANS BC857W SOT323	TRANSISTOR	344-27468	
Q4804	TRANS BC857BW SOT323 LV030	TRANSISTOR	344-28404	
Q4832	TRANS BCR198W SOT323 PNP	TRANSISTOR	344-27269	
Q4833	TRANS BC847BW SOT323	TRANSISTOR	344-27272	
Q701	TRANS 2SA1162Y-1	TRANSISTOR	344-90354935	
Q702	TRANS 2SK2503-1	TRANSISTOR	344-90354938	
Q703	TRANS 2SC2712Y-1	TRANSISTOR	344-90354933	
Q707	TRANS DTC144EE-1	TRANSISTOR	344-90354937	
Q708	TRANS FM7T18-1	TRANSISTOR	344-90354939	
Q709	TRANS DTC144EE-1	TRANSISTOR	344-90354937	
Q710	TRANS 2SA1162Y-1	TRANSISTOR	344-90354935	
Q751	TRANS FZT1053A-1	TRANSISTOR	344-90354940	
Q752	TRANS FZT1053A-1	TRANSISTOR	344-90354940	
Q753	TRANS 2SA1162Y-1	TRANSISTOR	344-90354935	
Q754	TRANS DTC114YE-1	TRANSISTOR	344-90354941	
Q757	TRANS UPA606T-1	TRANSISTOR	344-90354942	
SPEZIALTEILE		SPECIAL PARTS		
10	FILT. OFW K 9463 M	FILTER	290-25323	
20	DECKEL	LID	501-87236011	
21	DECKEL	LID	501-87236011	
21	KABELBAUM DISPLAY	CONNECTING CABLE	171-90414947	
2-12	SCHAUMGUMMI	FRAME	549-90354989	
2-2	RUECKWANDAUFKLEBER	FRAME	549-90354979	
25	TYPENSCHILD	INDICATING UNIT	663-90414949	
3-1	ABDECKUNG SELBSTKLEBEND SCHW. SCHLITZ	COVER	568-90354986	
3-2	SCHAUMGUMMI F. FUSSRING GEBOGEN 10 CM	COVER	568-90354987	
3-3	BODENPLATTE FUSSRING	BOTTOM COVER	777-90354988	
36	KABELBAUM 4-POL.	CONNECTING CABLE	171-90354995	
37	KABELBAUM 20-POL.	CONNECTING CABLE	171-90354997	
38	KABELBAUM 50-POL.	CONNECTING CABLE	171-90354994	
39	KABELBAUM 5-POL.	CONNECTING CABLE	171-90354993	
4	LAMPEN-SET	INCANDESCENT LAMP	383-90354998	
40	KABELBAUM 11-POL.	CONNECTING CABLE	171-90354992	
43	KABELBAUM 50-POL.	CONNECTING CABLE	171-90414956	
FB1202	SPULE	CHOKE	296-90354964	
FB1203	SPULE	CHOKE	296-90354965	
FB702	SPULE	CHOKE	296-90354961	
FB703	SPULE	CHOKE	296-90354961	
FB704	SPULE	CHOKE	296-90354961	
FB705	SPULE	CHOKE	296-90354962	
FB706	SPULE	CHOKE	296-90354961	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70		BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
FB708	SPULE		CHOKER	296-90354962	
FB709	SPULE		CHOKER	296-90354963	
L4192	LUFTSPULE		COIL	297-27573	18.07.2000
L4192	SPULE		COIL	297-27573001	15.01.1999
L4192	DR. 270N J 0603 SMD LV030	+	CHOKER	296-28579	
L4193	LUFTSPULE		COIL	297-27571	
L4201	LUFTSPULE		COIL	297-27571	
L4201	SPULE		COIL	297-27571001	
L4202	LUFTSPULE		COIL	297-28046	21.09.2000
L4202	DR-CH 330N0 J 0805 LL2012 LV030		CHOKER	296-29271	
L4231	SPULE		COIL	297-27569001	
L4232	SPULE		COIL	297-27569001	
L4233	SPULE		COIL	297-27561001	
L4301	SPULE		COIL	297-27562001	
L4301	SPULE		COIL	297-27566001	02.05.2001
L4302	SPULE		COIL	297-27561001	02.05.2001
L4302	DR-CH 27N0 K 0805 LQN21A LV030		CHOKER	296-29269	09.05.2001
L4303	DR-CH 27N0 K 0805 LQN21A LV030		CHOKER	296-29269	
L4311	LUFTSPULE		COIL	297-27571	
L4331	SPULE		COIL	297-27561001	
L4332	SPULE		COIL	297-27683001	
L4342	SPULE		COIL	297-27553001	02.05.2001
L4342	DR-CH 15N0 K 0805 LQN21A LV030		CHOKER	296-29270	09.05.2001
L4343	DR-CH 15N0 K 0805 LQN21A LV030		CHOKER	296-29270	
L4351	DR. 68N J 0805 800M-Q30 LV030		CHOKER	296-28465	
L4352	DR. 68N J 0805 800M-Q30 LV030		CHOKER	296-28465	
L4401	SPULE		COIL	297-27562001	
L4402	SPULE		COIL	297-27553001	
L4411	SPULE		COIL	297-27568001	
L4422	SPULE		COIL	297-27559001	
L4431	SPULE LV297-27546		COIL	297-27546001	
L4432	SPULE		COIL	297-27683001	
L4441	SPULE		COIL	297-27561001	02.05.2001
L4441	DR-CH 27N0 K 0805 LQN21A LV030		CHOKER	296-29269	09.05.2001
L4442	SPULE		COIL	297-27683001	02.05.2001
L4442	DR-CH 15N0 K 0805 LQN21A LV030		CHOKER	296-29270	09.05.2001
L4443	DR-CH 27N0 K 0805 LQN21A LV030		CHOKER	296-29269	
L4444	DR-CH 15N0 K 0805 LQN21A LV030		CHOKER	296-29270	
L4451	DR. 12N K 0805 800M-Q45 LV030		CHOKER	296-28466	
L4452	DR. 12N K 0805 800M-Q45 LV030		CHOKER	296-28466	
L4503	SPULE		COIL	297-27564001	
L4523	SPULE		COIL	297-27552001	
L4543	SPULE		COIL	297-27548001	
L4546	SPULE		COIL	297-27559001	
L4701	DR-RA 0U68 K 4X3X4 5R0 LV298-21/020		CHOKER	298-27591020	
L4816	SPULE LV297-27743		COIL	297-27743	
L4831	DR-RA 6U8 J 4X3X4 5R0 LV298-21/020		CHOKER	298-27588020	
L701	SPULE		CHOKER	296-90354955	
L705	SPULE		CHOKER	296-90354956	
L706	SPULE		CHOKER	296-90354955	
L751	SPULE		CHOKER	296-90354957	
L752	SPULE		CHOKER	296-90354957	
L804	SPULE		CHOKER	296-90354958	
L805	SPULE		CHOKER	296-90354958	
P4821	POT 10K 6MM KOHLESCHICHT HORIZONT.		POTENTIOMETER	375-27744	
Q4210	TRANS BF1100WR SOT343	+	TRANSISTOR	344-27268	

POSNR. ITEMNMB	KURZTEXT DESCRIPTION	60415A70		BESTELLNr. LIST-PART-NMB	ENTF-DAT. LAST-DATE
Q4310	TRANS BF1100WR SOT343	+	TRANSISTOR	344-27268	
Q4410	TRANS BF1100WR SOT343	+	TRANSISTOR	344-27268	
Q4836	TRANS BC847B SOT23		TRANSISTOR	344-14974	
Q4853	TRANS BC847BW SOT323		TRANSISTOR	344-27272	
W1001	FOLIENSTECKVERB. 20-POL RM0,5		CONTACT LEDGE	326-28933	
W1002	STIFTW.VERT 7-P NAT 2R50 EH LV326-11		CONTACT LEDGE	326-20908	
W1002	KONTAKTLEISTE 21POL RM2,54 LV326-27320		CONTACT LEDGE	326-27320021	
W1007	BUCHSENLEISTE 5POL RM5,08 LV326-28942		CONTACT LEDGE	326-28942005	
W1008	FLACHSTECKER,GEBOGEN" UG 2 " LV		PLUG	321-82232001	
W1009	FOLIENSTECKVERB. 50-POL RM0,5		CONTACT LEDGE	326-28934	
W1012	FLACHSTECKER,GEBOGEN" UG 2 " LV		PLUG	321-82232001	
W1013	STIFTW.VERT 11-P NAT 2R00 PH JST		CONTACT LEDGE	326-28935	
W1014	BUCHSENLEISTE 6POL RM5,08 LV326-28942		CONTACT LEDGE	326-28942006	
W1015	FLACHSTECKER,GEBOGEN" UG 2 " LV		PLUG	321-82232001	
W1018	FLACHSTECKER,GEBOGEN" UG 2 " LV		PLUG	321-82232001	
W4100	KOAX-BUCHSE		SOCKET	323-27599	
W4200	KONTAKTLEISTE 6POL RM5,08 LV326-27320		CONTACT LEDGE	326-27320016	
W4800	KONTAKTLEISTE 4POL RM5,08 LV326-27320		CONTACT LEDGE	326-27320014	
W4800	KONTAKTLEISTE 5POL RM5,08 LV326-27320		CONTACT LEDGE	326-27320015	26.01.2001
X4651	QUARZ 4,000000 MHZ HC49U3 LOW PROFILE		CRYSTAL OSCILLATOR	385-27752	
X4701	FILT. OFW K 6263 K		FILTER	290-25214	
X4751	FILT. OFW K 9463-M		FILTER	290-25323Y20	
X4771	FILT. OFW K 9461-M		FILTER	290-25216Y20	
X4831	PIEZO FILTER 5,5MHZ/5,742MHZ LV020		CERAMIC FILTER	386-27630020	
X4832	PIEZO FILTER 4,5 MHZ LV020		CERAMIC FILTER	386-27305020	

IMPORTANT SERVICE SAFETY PRECAUTION

Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

CAUTION

FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE FUSE.

F1 (2A, 250V), F2 (1.6A, 250V), F3 (1.6A, 250V), F4 (315mA, 250V) FUSE.

BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

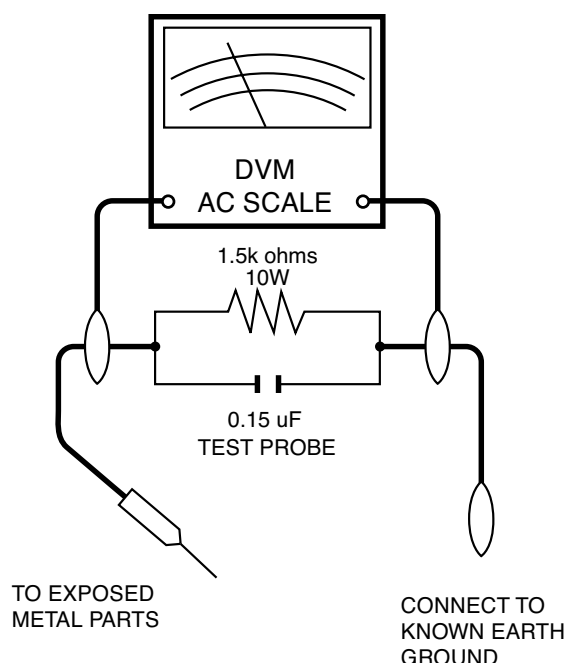
Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.

- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon and etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

Any reading of 0.75V peak (this corresponds to 0.5 milliamp. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD television have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage and etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "!"

and shaded areas in the **Replacement Parts Lists** and **Schematic Diagrams**.

For continued protection, replacement parts must be identical to those used in the original circuit.

The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

ELECTRICAL SPECIFICATIONS

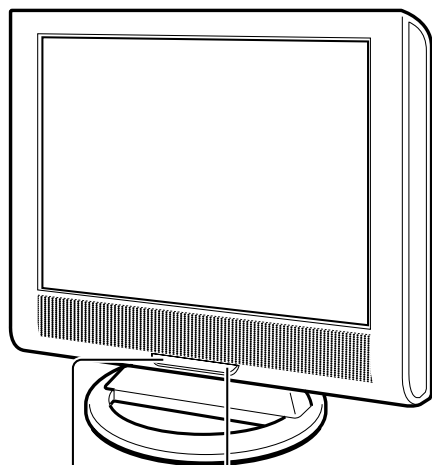
Items	15" LCD COLOUR TV, Model: LC-15A2L
LCD panel	15" TFT LCD
Number of pixels	921,600 dots
Video colour system	PAL/NTSC/SECAM
TV FUNCTION	
TV Standard (CCIR)	BG/DK/I/L
TV Tuning System	Auto preset 100 ch.
STEREO/BILINGUAL	NICAM, IGR
AUTO PRESET	Yes
CATV	~Hyper Band
Brightness	400 cd/m ²
Lamp life	60,000 hours
Viewing angles	H: 160° V: 160°
Audio amplifier	0.6 W 2, 2.5 W 1
Speakers	3 4 cm 2 pcs., 65 mm 1 pc.
Terminals	
AV1	VIDEO, S-VIDEO-IN, RGB, AUDIO
AV2	VIDEO, AUDIO
OUT	AUDIO
ANTENNA	DIN
HEADPHONE	3.5 mm jack (Rear)
OSD language	English/German/Dutch/French/Italian/Spanish/Swedish
Power requirement	DC 12V, AC 110 - 240 V, 50/60 Hz
Power consumption	27W (Connected to DC12V)
Weight	5.9 kg(approx.), incl. stand, excl. accessories
Accessories	R/C, Batteries, AC adapter, AC cord, Operation manual, Cable clamp

Specifications are subject to change without prior notice.

OPERATION MANUAL

Front view

Controls



Remote sensor window
(The actual location is not visible.)

Power/Standby indicator

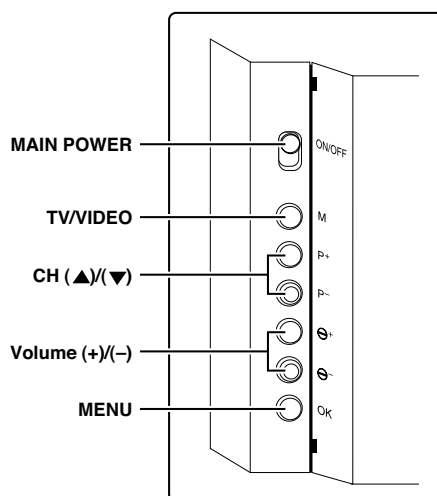
A green indicator lights when the power is on and a red indicator lights when in the standby mode (the indicator will not light when the main power is off).

Note:

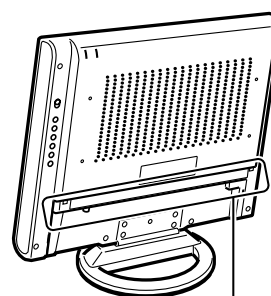
- **TV/VIDEO**, **CH (▲)/(▼)**, and **Volume (+)/(-)** on the main unit have the same functions as the same buttons on the remote control. Fundamentally, this operation manual provides a description based on operation using the remote control.

To change the vertical angle of the LCD TV set, tilt the screen up to 10 degrees forward or 20 degrees backward. The TV set can also be rotated 90 degrees horizontally. Please adjust the angle so that the TV set can be watched most comfortably.

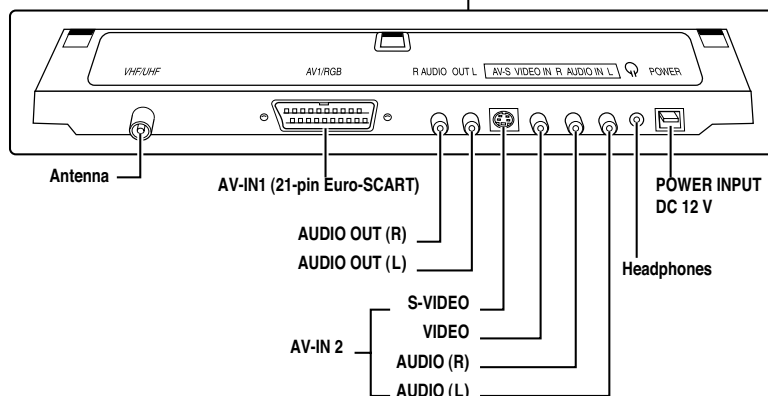
Rear control panel



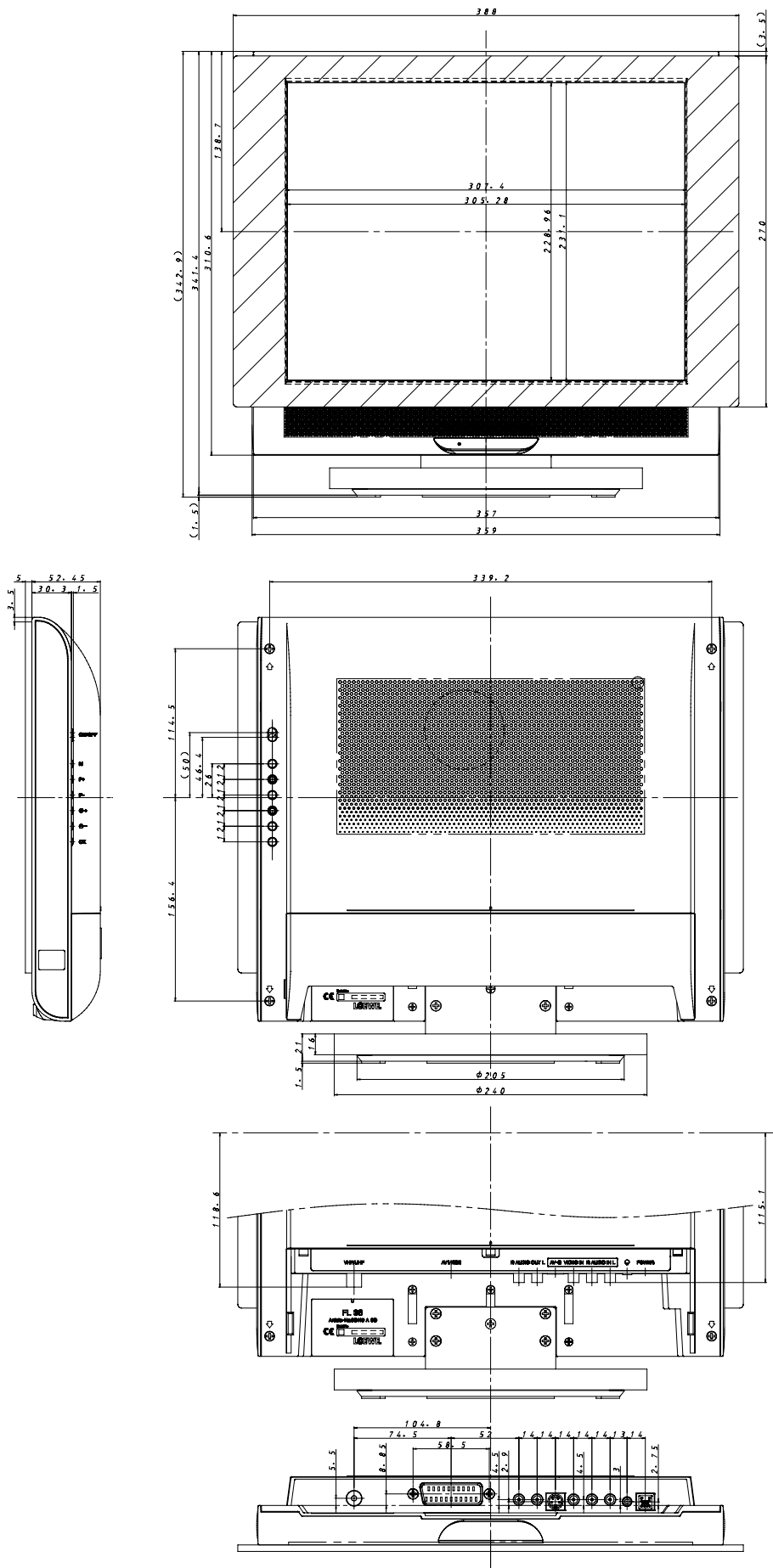
Rear view



Terminals



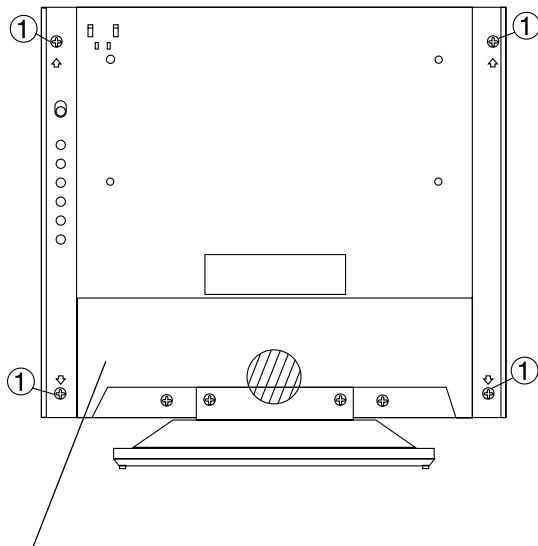
OUTLINE DIMENSION FIGURE



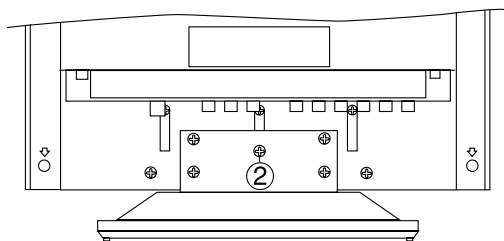
Units: mm

REMOVING OF MAJOR PARTS

1. Insert your finger into the center of the terminal cover and pull it toward you to detach the terminal cover. Remove the screws installing a stand.
2. Remove the four screws "1" and one screw "2".
3. Open the cabinet B by approx. 45° from the bottom of the cabinet (stand side).
4. Remove the lead wire from the cable clamp "3".
5. Remove the power connector "4".
6. Remove the connector "5" from the light reception unit.
7. Remove the lead wire from the cable clamp "6".
8. Remove the speaker connector "7".
9. Remove the FFC from the FFC connector "8" on the main PWB.
10. Remove the connector "9" from the switch PWB.
11. Remove the right and left speaker connectors "10" on the terminal PWB.



Terminal Cover



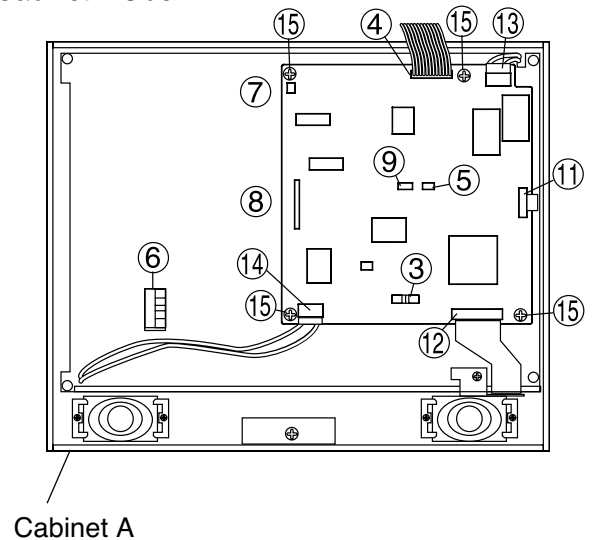
<<Disassembly of the main PWB>>

1. Disconnect the flexible cable connectors "11" and "12" from the LCD panel.
2. Disconnect the cable connectors "13" and "14" from the fluorescent lamp.
3. Remove the four screws "15".

<<Disassembly of the terminal PWB>>

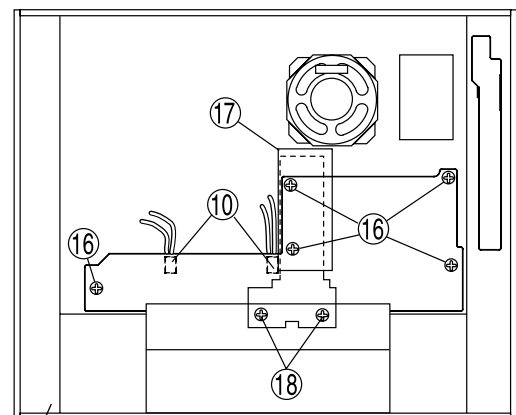
1. Remove the five screws "16".
2. Remove the two screws "18". Remove the cover "17". Take them out of the cabinet holes.

<<Cabinet A side>>



Cabinet A

<<Cabinet B side>>

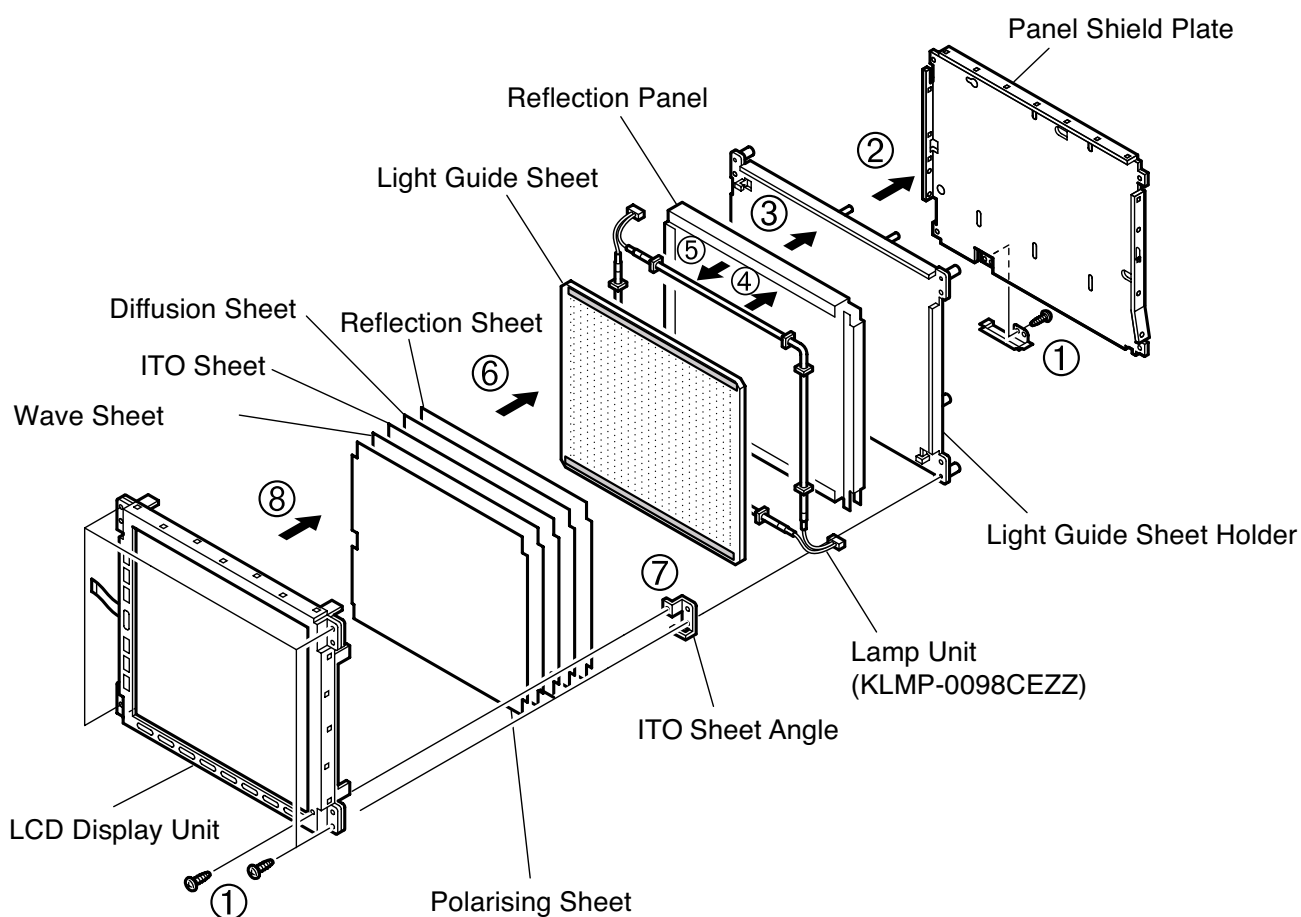


Cabinet B

- Caution for handling the LCD panel
1. Work in a clean room. (Humidity: 50% or more)
 2. A worker must wear arm bands.
 3. Work on a conductive mat.
 4. Do not expose the unit to shock such as fall or vibration.

<<Disassembly of LCD Panel>>

1. Remove the six LCD unit fixing screws.
2. Remove the panel shield plate.
3. Remove the light guide sheet holder.
4. Remove the reflection panel lamp unit.
5. Remove the lamp unit.
6. Remove the light guide sheet.
7. Remove the ITO sheet angle.
8. Remove the ITO sheet, diffusion sheet and the polarising sheet.



ADJUSTING PROCEDURE OF EACH SECTION

[1] Entering the MAIN side adjustment process mode

There are three methods below.

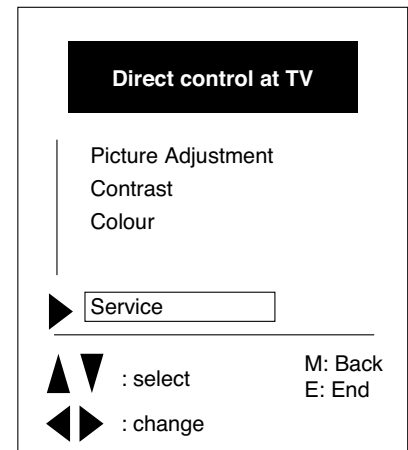
- 1) Press the "Adjustment process key" on the remote control after turning on the power.
- 2) Pressing both the M key and the TV/VIDEO key on the main body, turn on the power. Then, press the volume DOWN key and the tuning UP key at the same time.
- 3) Turn on the power with falling either KEY4 (pin 81 of microprocessor) or KEY5 (pin 82 of microprocessor) to "L".

[Note] For the method 3), the ROM is initialized at the same time. Therefore, 3) must be executed if IC2004 or IC2001 is changed. For 1) or 2), the main body only enters the MAIN side adjustment process.

[2] Entering the TUNER side adjustment process mode

- 4) Entering the TUNER side adjustment process

MENU key on the main body Tuning UP key (remote control)
Select the position shown in the figure below and press the M key (remote control) within 1 second. Enters the adjustment process.



[3] Adjustment

MAIN side adjustment (Press the "M" key to move the cursor and press the volume UP/DOWN key to make an adjustment.)

- Power supply voltage adjustment (+B 5V)
- Model setting
- Inch size setting
- COMMON BIAS adjustment of LCD module
- CUTOFF adjustment

TUNER side adjustment (Press the tuning UP/DOWN key to move the cursor and press the volume UP/DOWN key to make an adjustment.)

- Horizontal size adjustment (LCD adjustments)
- Video adjustment (other adjustments)
 - Y delay
 - Subcontrast
 - Subcolour
 - Subbrightness
 - Tint offset

The TUNER side adjustment is possible. However, it is recommended to replace EAROM (I2).

3-1. +B adjustment

Page 9 of MAIN side adjustment process +B-ADJ
Adjust the voltage of the pin 49 of SC401 to $5.0 \pm 0.05V$.

3-2. Model setting

Page 9 of MAIN side adjustment process MODUL
Set to A2L.

3-3. Inch size setting

Page 9 of MAIN side adjustment process INCH SIZE
Set to 15.

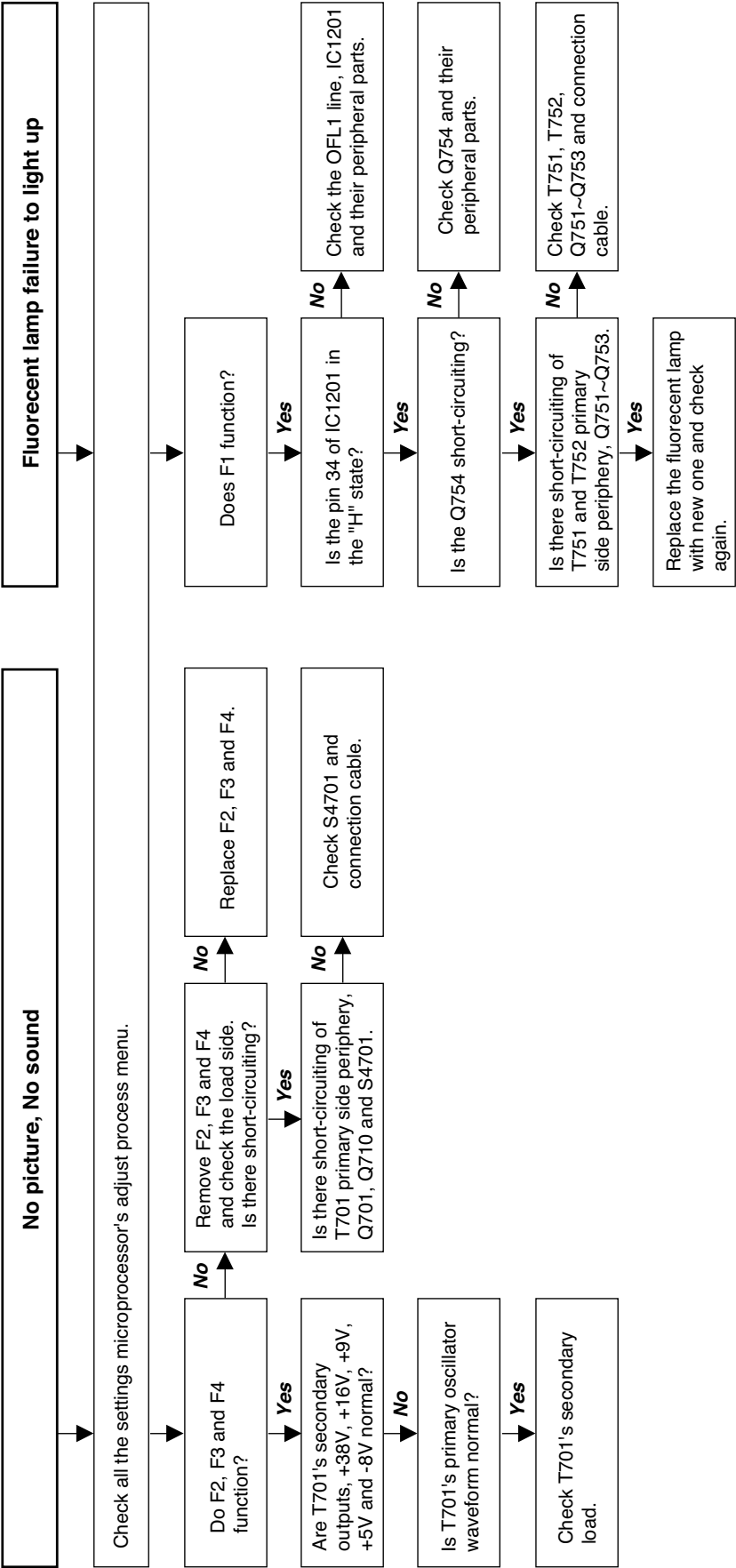
3-4. COMMON BIAS adjustment of LCD module

Page 9 of MAIN side adjustment process COM BIAS
Input the picture of gray scale and adjust it so as to obtain the best contrast.

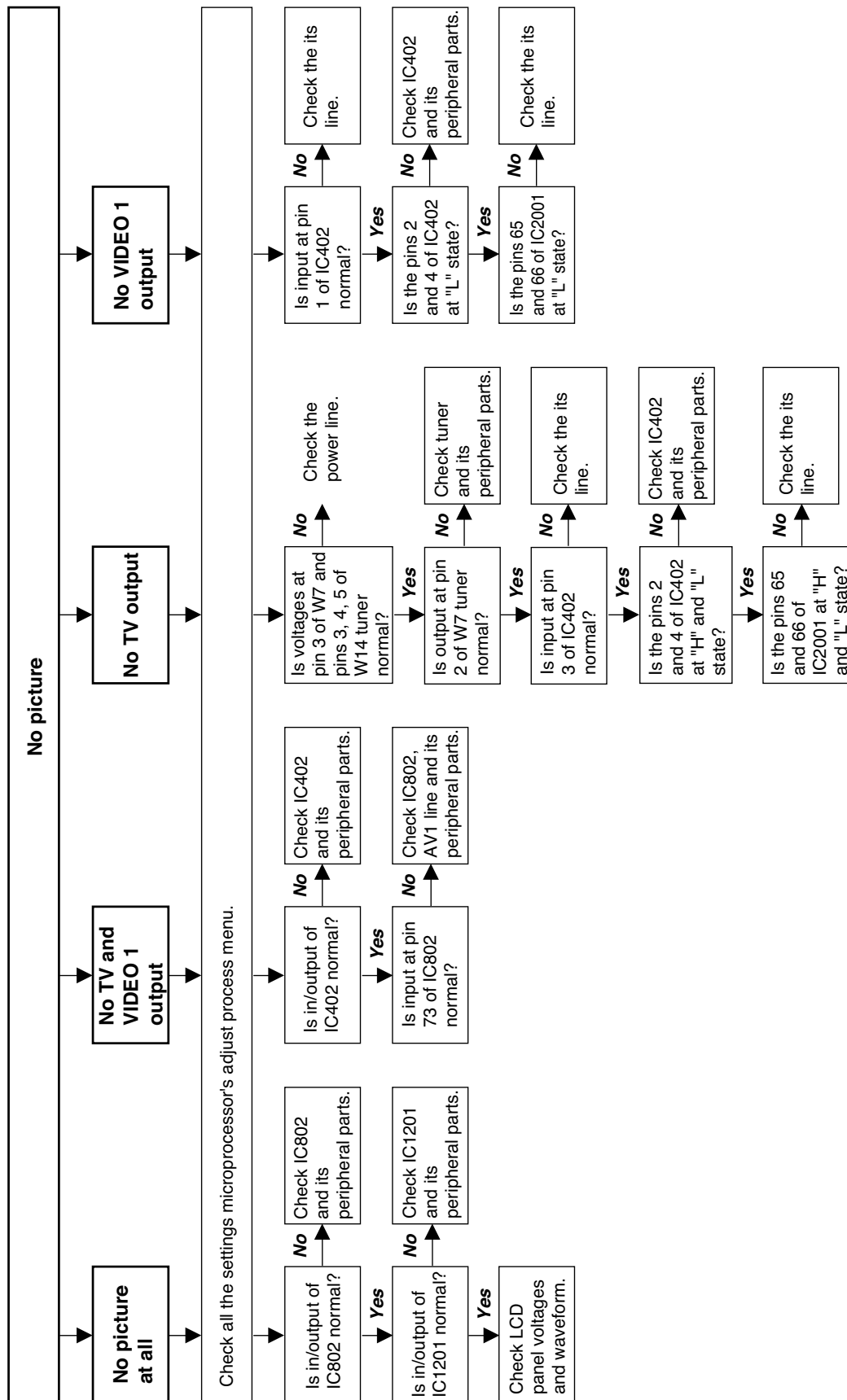
3-5. CUTOFF adjustment

Page 9 of MAIN side adjustment process R CUTOFF, B CUTOFF
Adjust it so as to obtain the optimal colour balance.

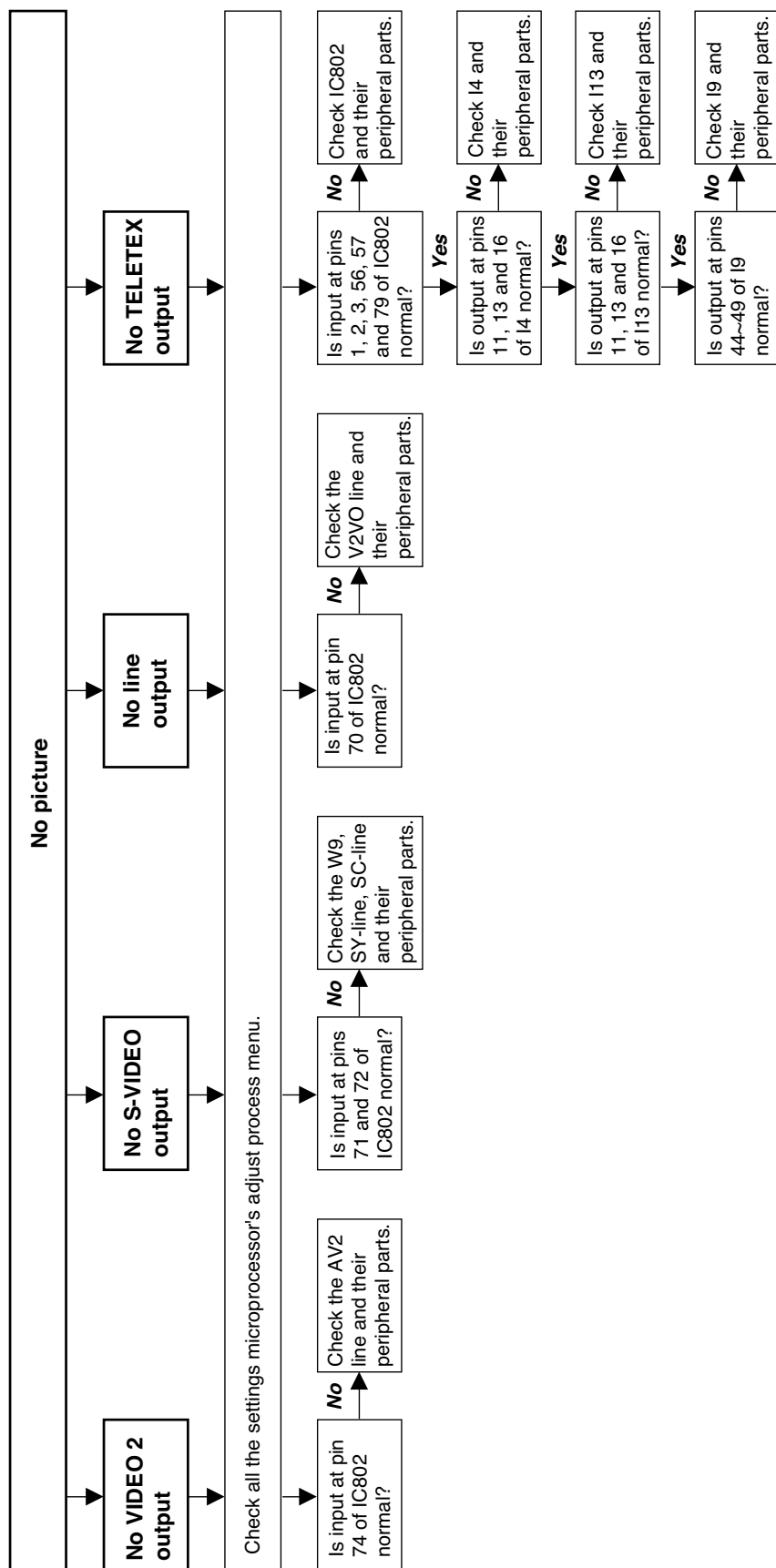
TROUBLE SHOOTING TABLE



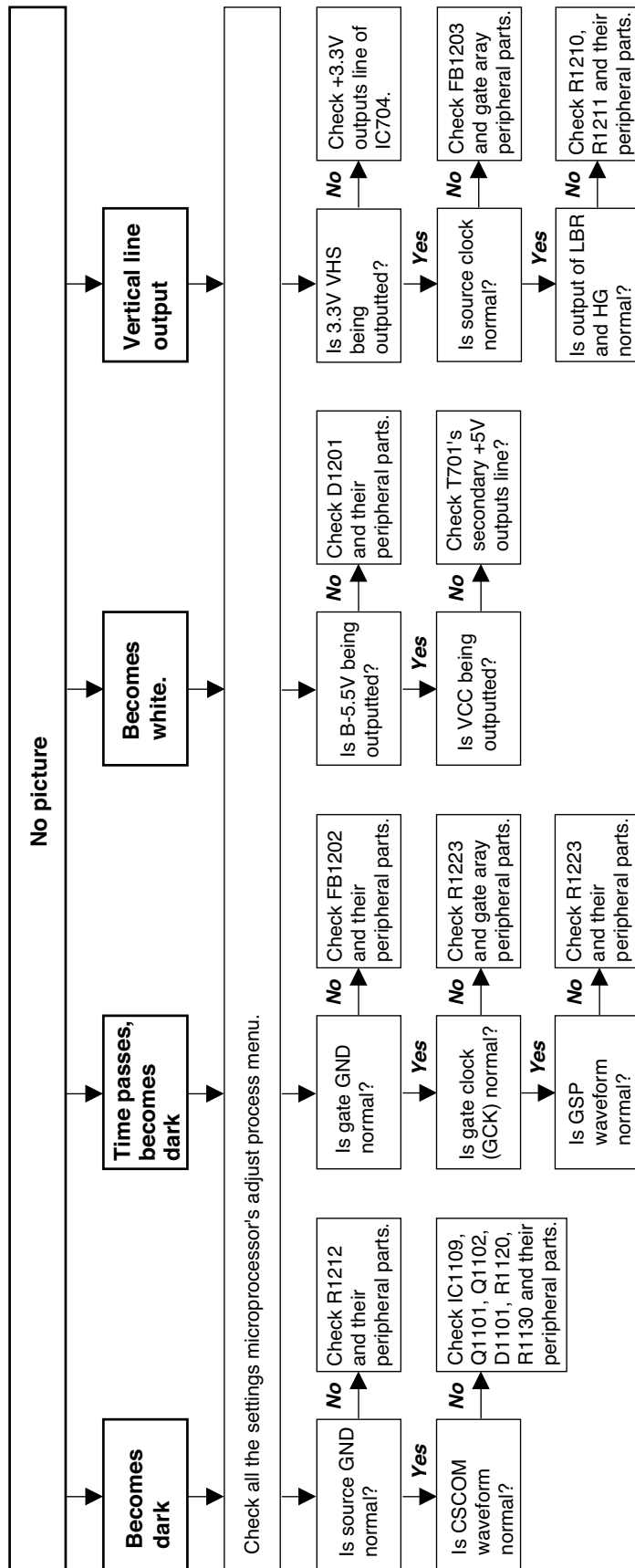
TROUBLE SHOOTING TABLE (Continued)



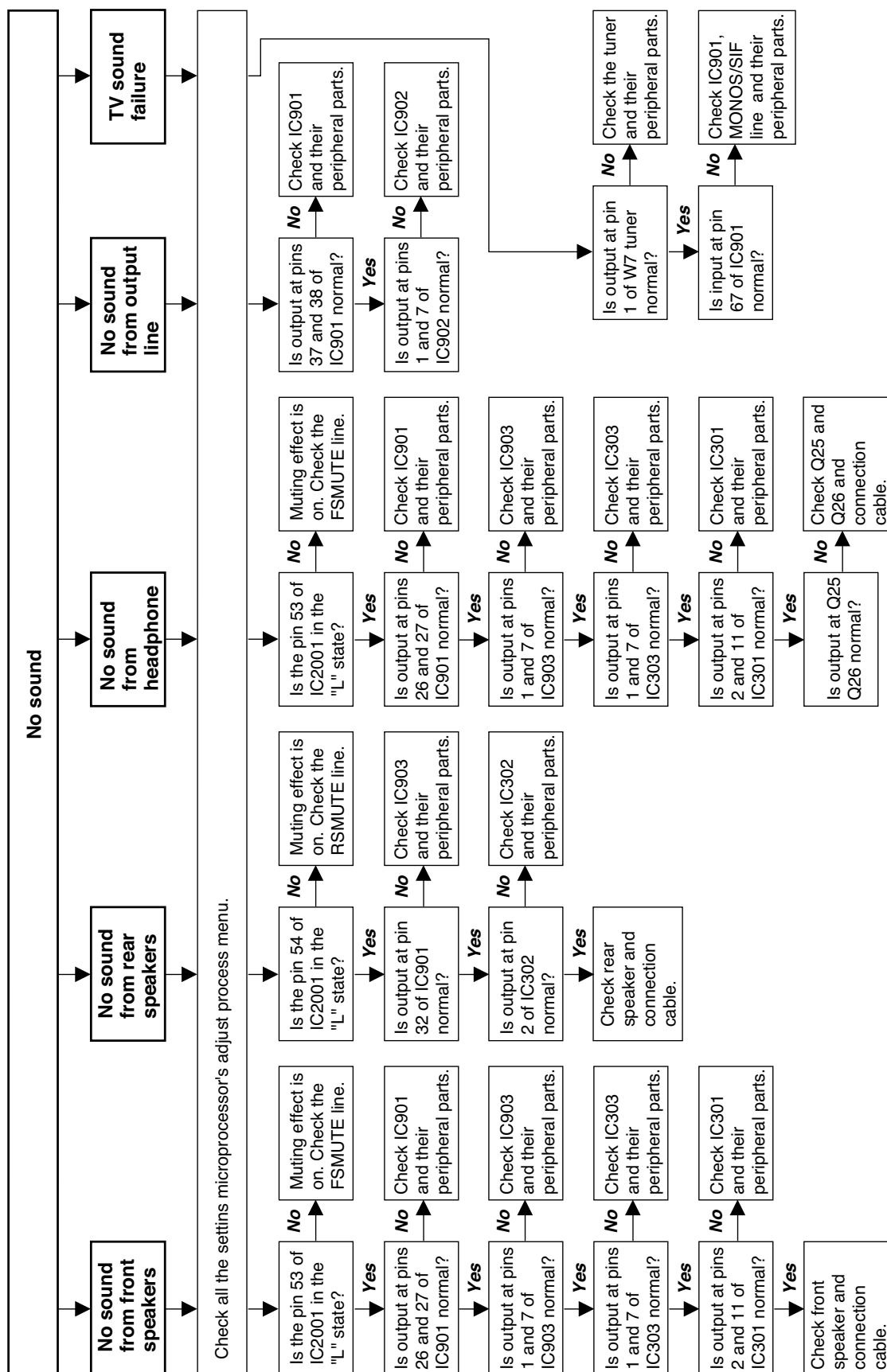
TROUBLE SHOOTING TABLE (Continued)



TROUBLE SHOOTING TABLE (Continued)

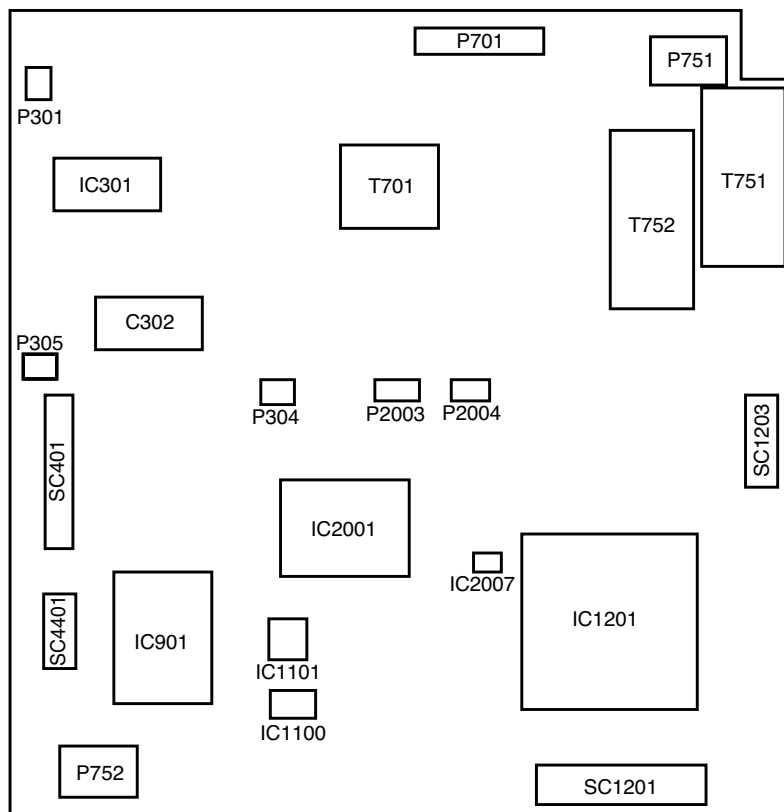


TROUBLE SHOOTING TABLE (Continued)

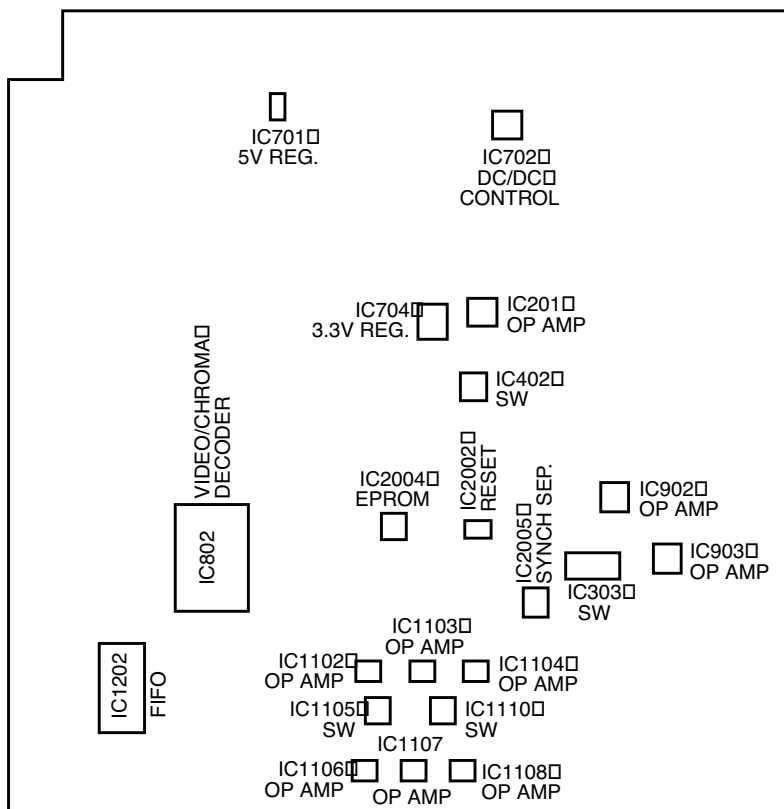


CHASSIS LAYOUT

MAIN Unit (Side-A)



MAIN Unit (Side-B)



1

2

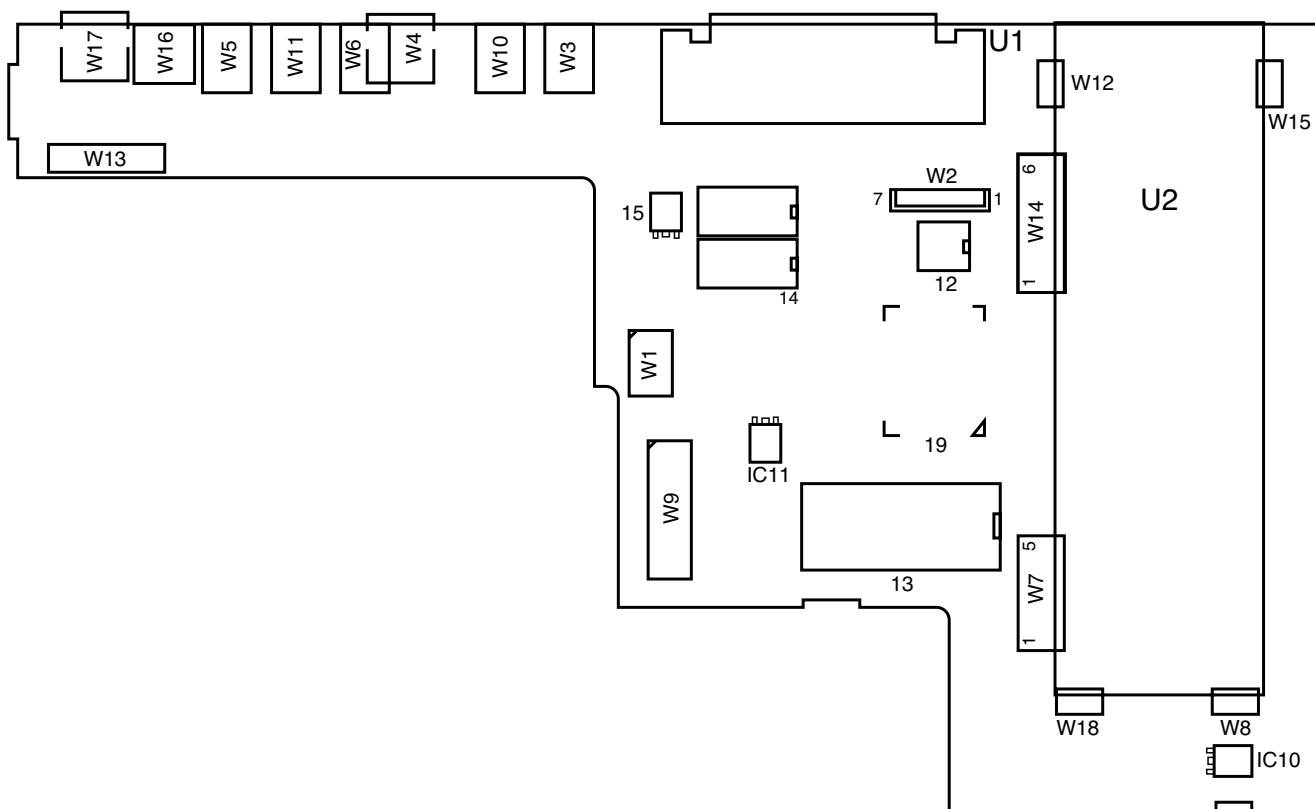
3

4

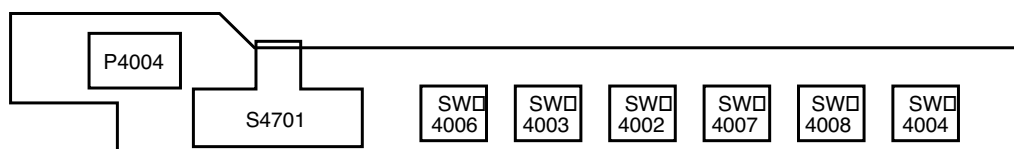
5

6

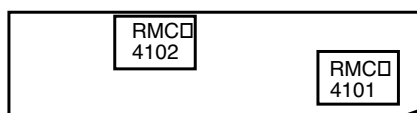
TERMINAL Unit



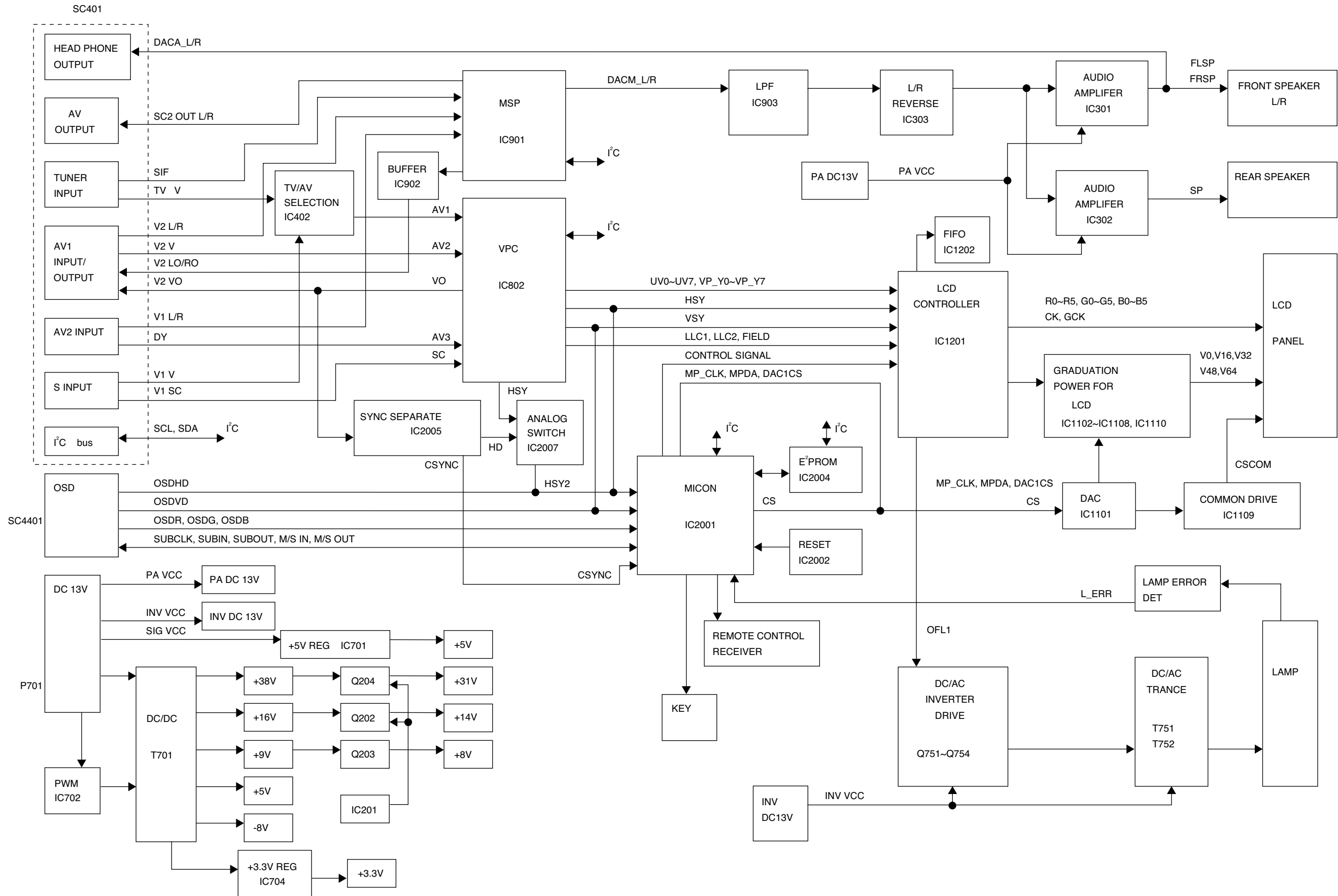
OPERATION Unit



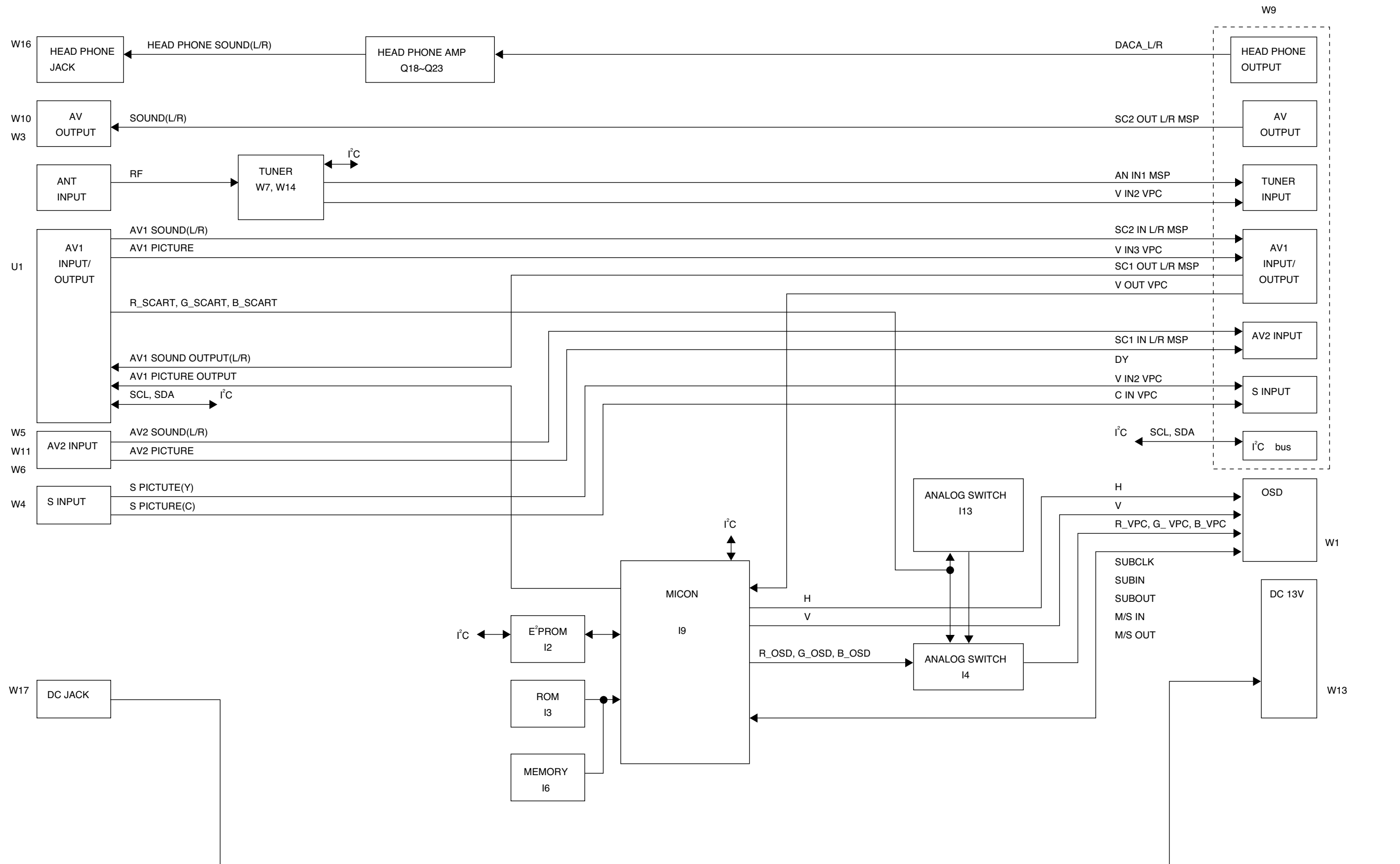
R/C RECEIVER Unit



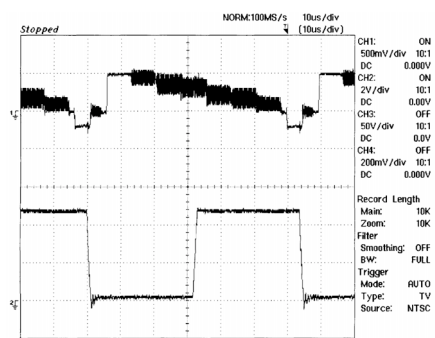
BLOCK DIAGRAMS
MAIN BLOCK DIAGRAM



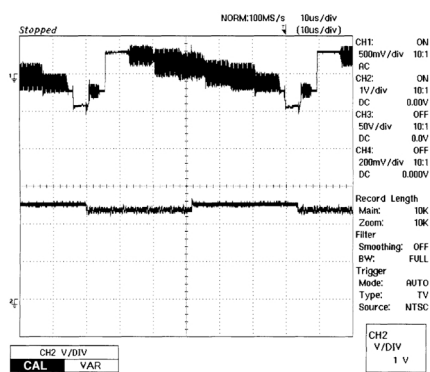
TERMINAL BLOCK DIAGRAM



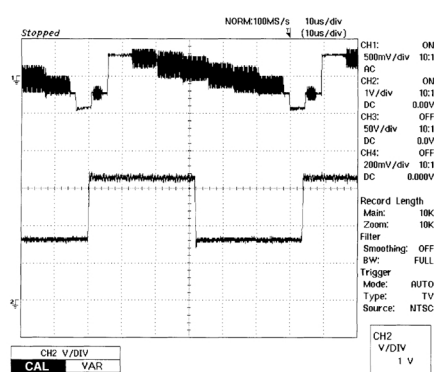
WAVEFORMS



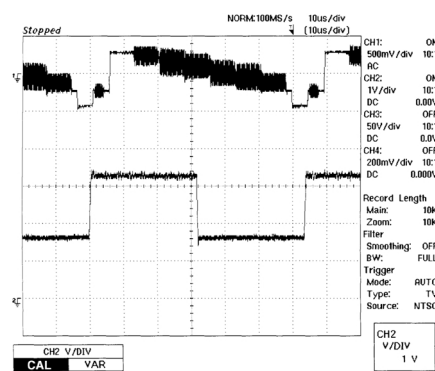
A. V0



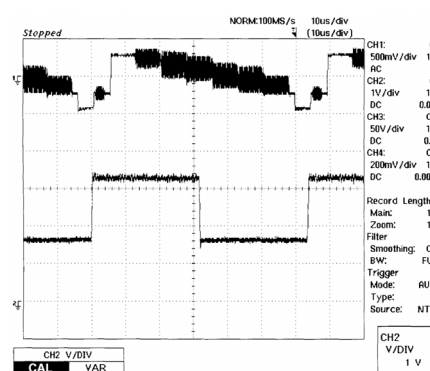
B. V16



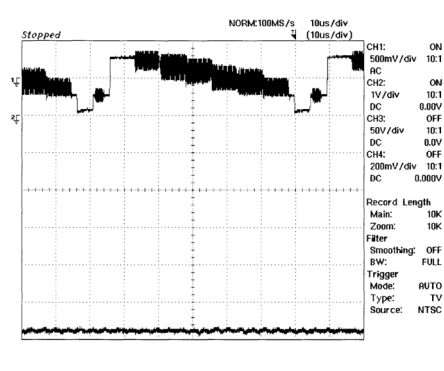
C. V32



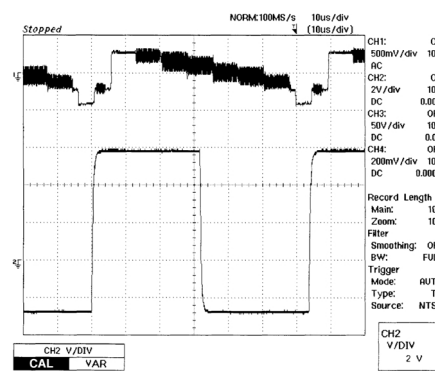
D. V48



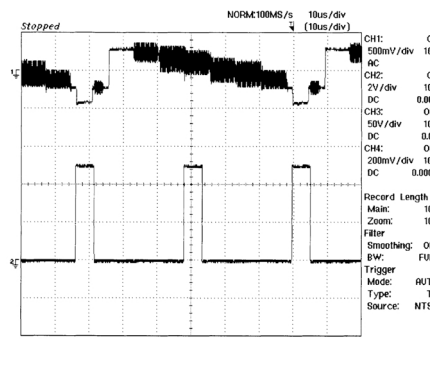
E. V63



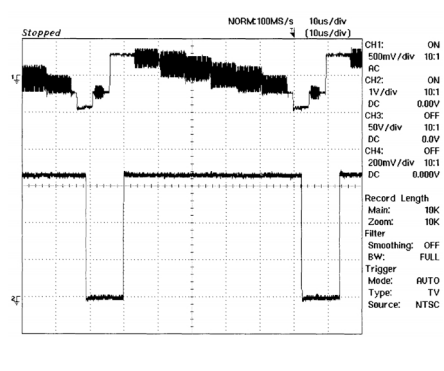
F. B-5.5



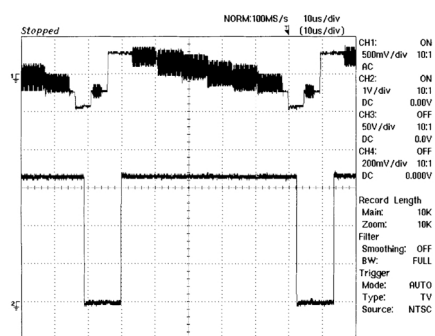
G. CSCOM



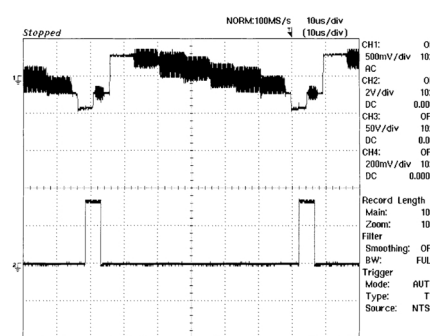
H. GCK



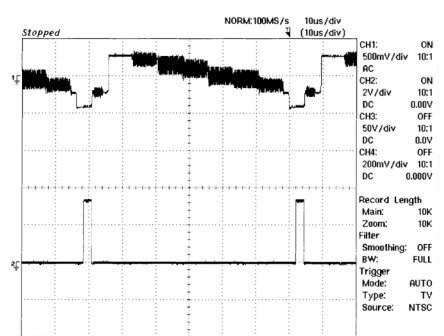
I. GSP



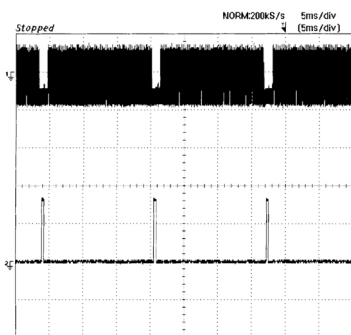
J. VACT



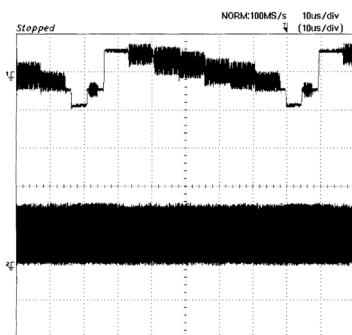
K. HC



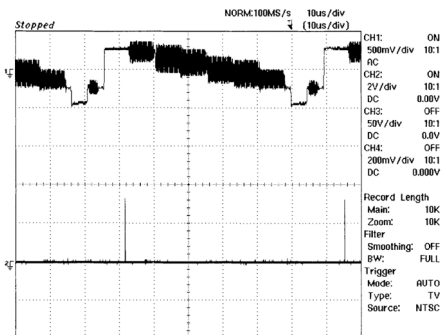
L. HSY



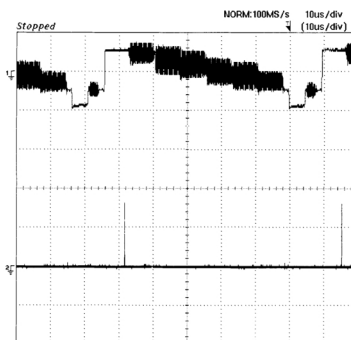
M. VSY



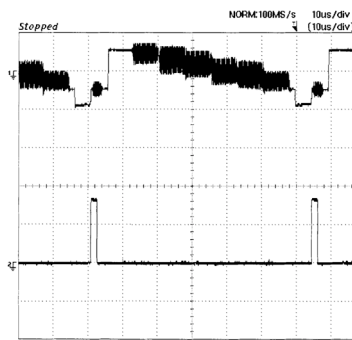
N. CK



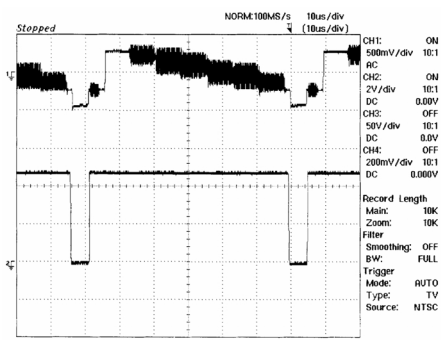
O. SPIO



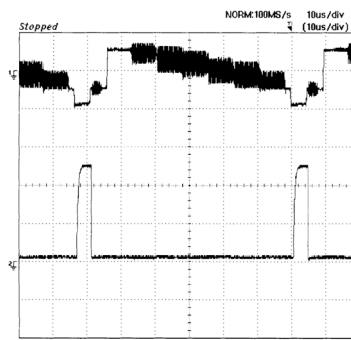
P. SPOI



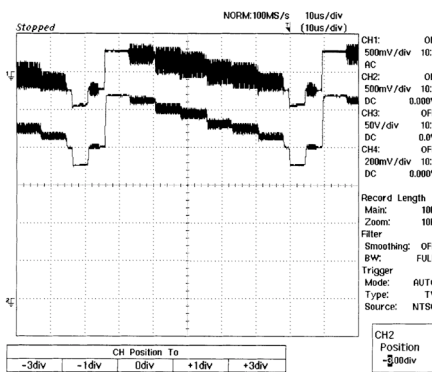
Q. HG



R. IC2005



S. CSYNC



T. VIDEO

DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. When the exclusive-use AC adapter is used, the colour bar signal of colour bar generator for service is input to get the normal screen. When the audio is minimized, the voltage value is measured with the 20 k Ω /V tester.

WAVEFORM MEASUREMENT CONDITION:

1. When the exclusive-use AC adapter is used, the colour density, lightness and colour hue are set to the center position, and the signal of colour bar generator for service is observed to get waveform.
The waveform test point is indicated with the mark (Q) in the wiring diagram.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance " Ω " is omitted.
(K=k $\times$ 1000 , M=M $\times$).
2. All resistors are $\pm 5\%$, unless otherwise noted.
(J= $\pm 5\%$, F= $\pm 1\%$, D= $\pm 0.5\%$)
3. All resistors are Carbon type, unless otherwise noted.
 ◎: Solid Ⓜ: Cement
 Ⓢ: Oxide Film Ⓣ: Special
 Ⓝ: Metal Coating

CAPACITOR

1. All capacitors are mF, unless otherwise noted.
(P=pF=mmF).
2. All capacitors are Ceramic type, unless otherwise noted.
 (ML) : Mylar (TA) : Tantalum
 (PF) : Polypro Film (ST) : Styrol

CAUTION:

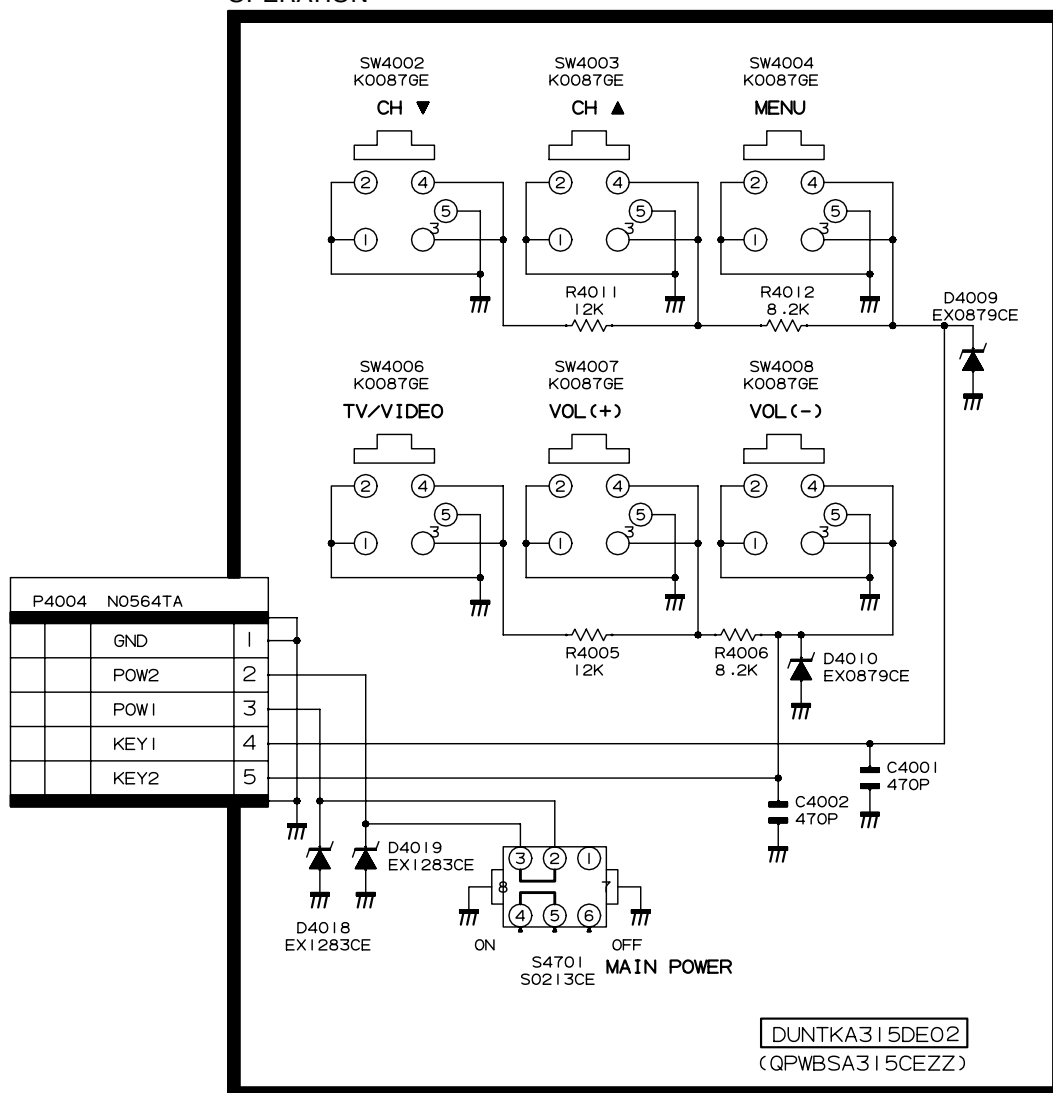
This circuit diagram is original one, therefore there may be a slight difference from yours.

IMPORTANT SAFETY NOTICE:

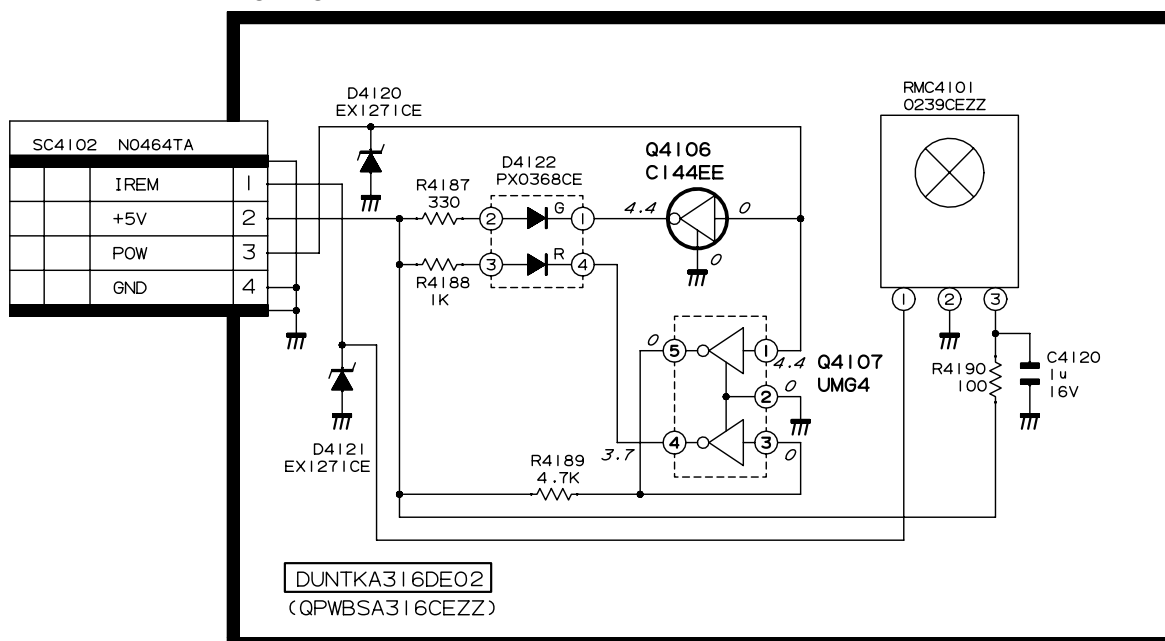
PARTS MARKED WITH "⚠" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

OPERATION and R/C RECEIVER Units

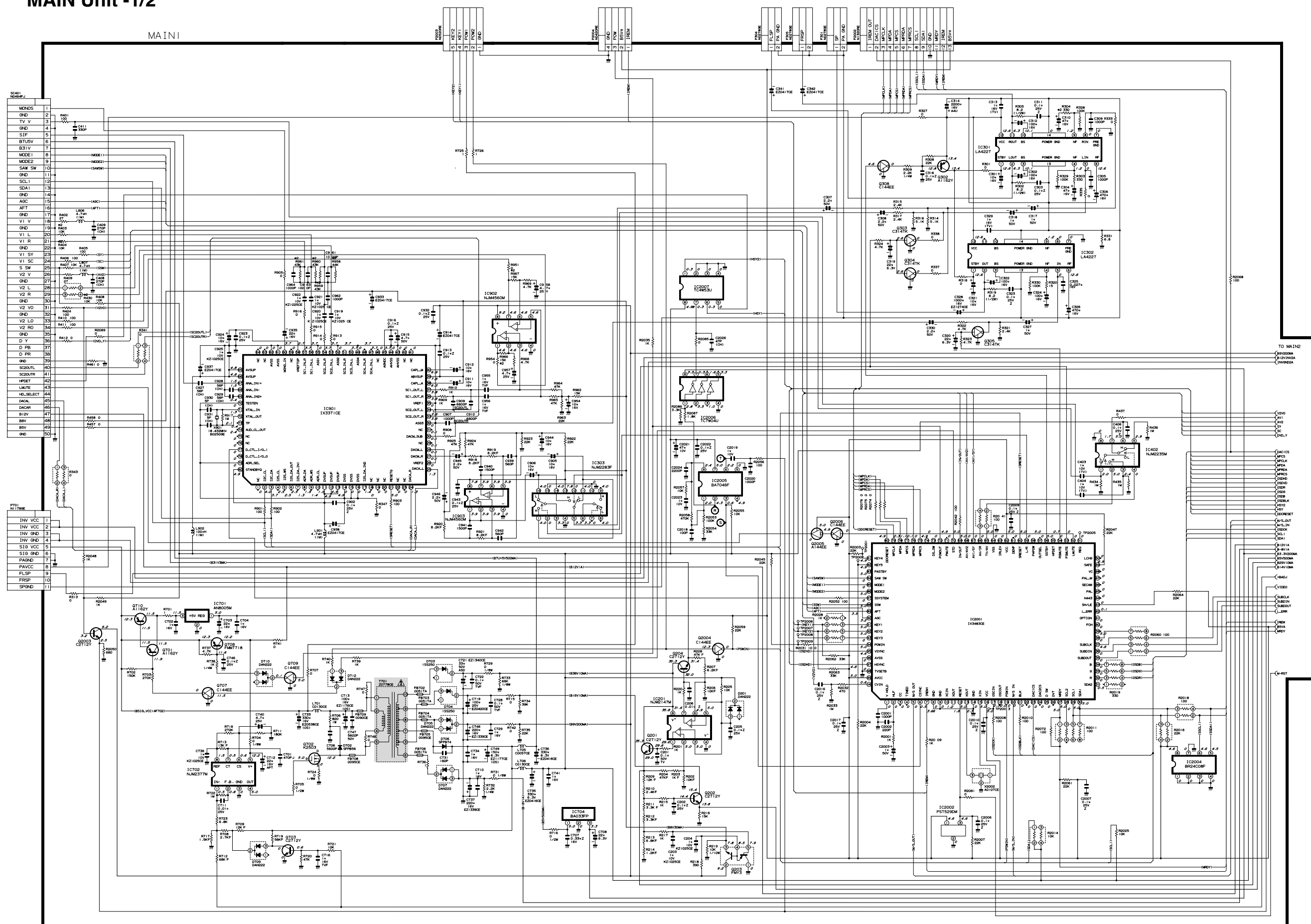
OPERATION



R/C RECEIVER

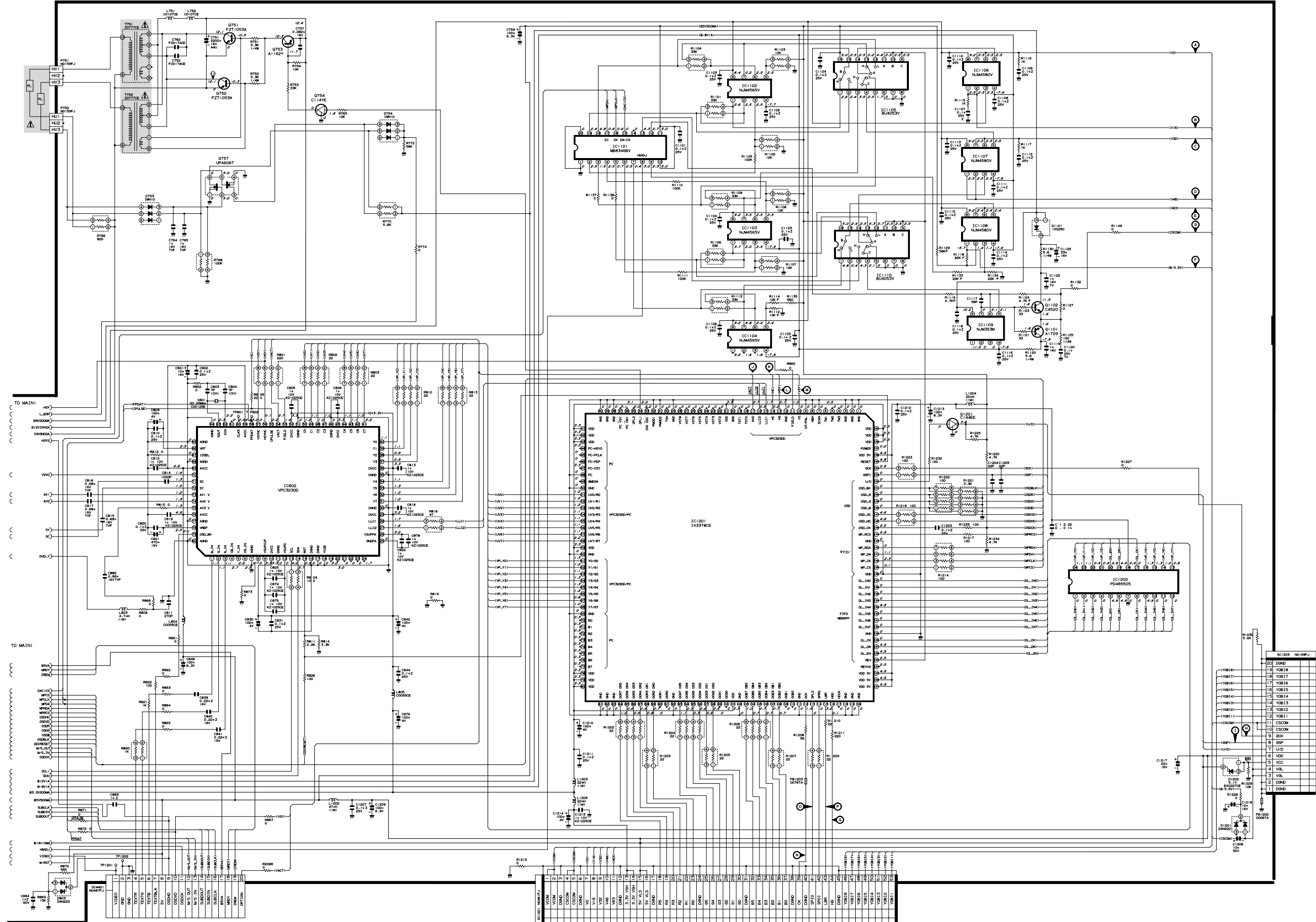


MAIN Unit -1/2

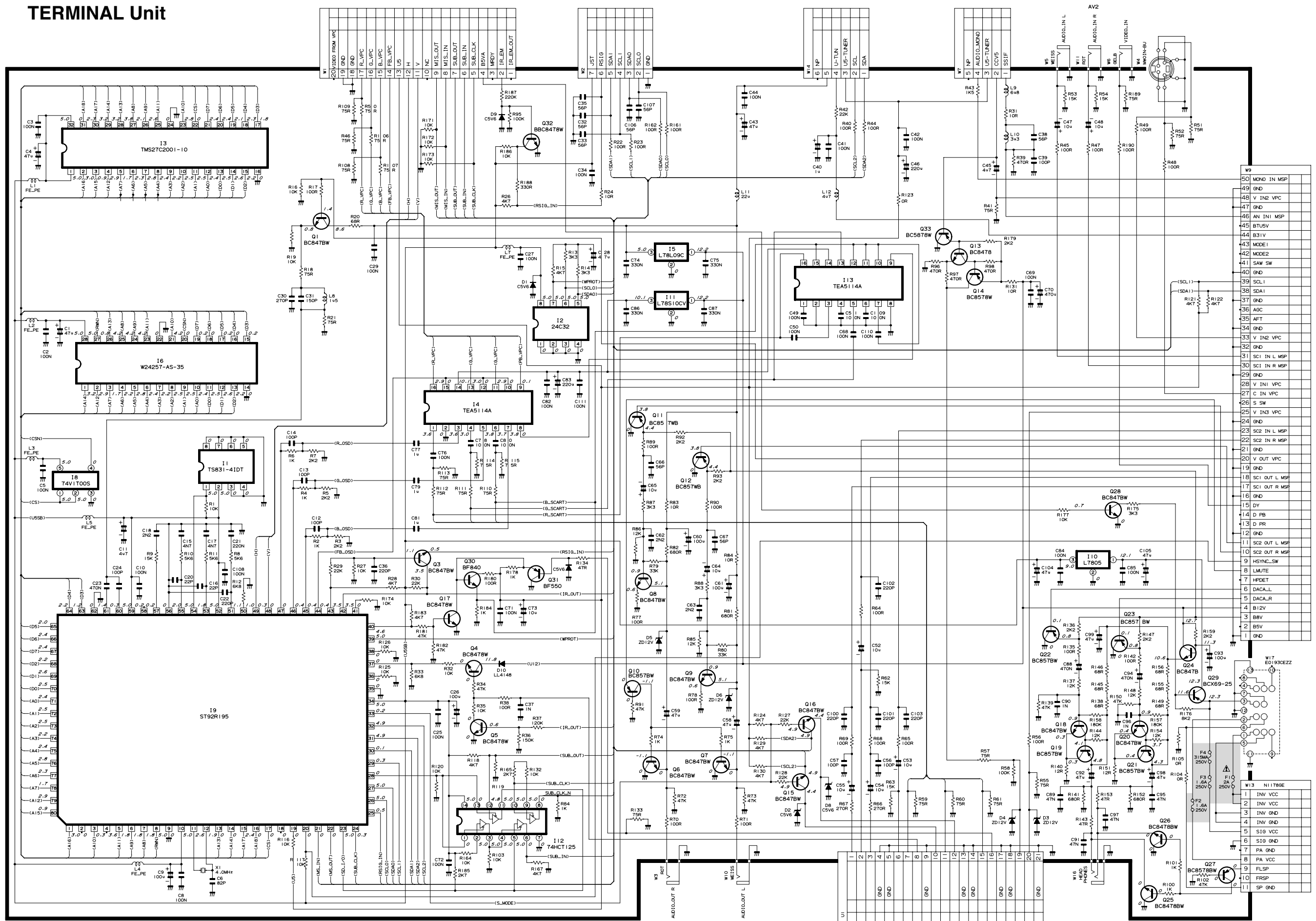


MAIN Unit -2/2

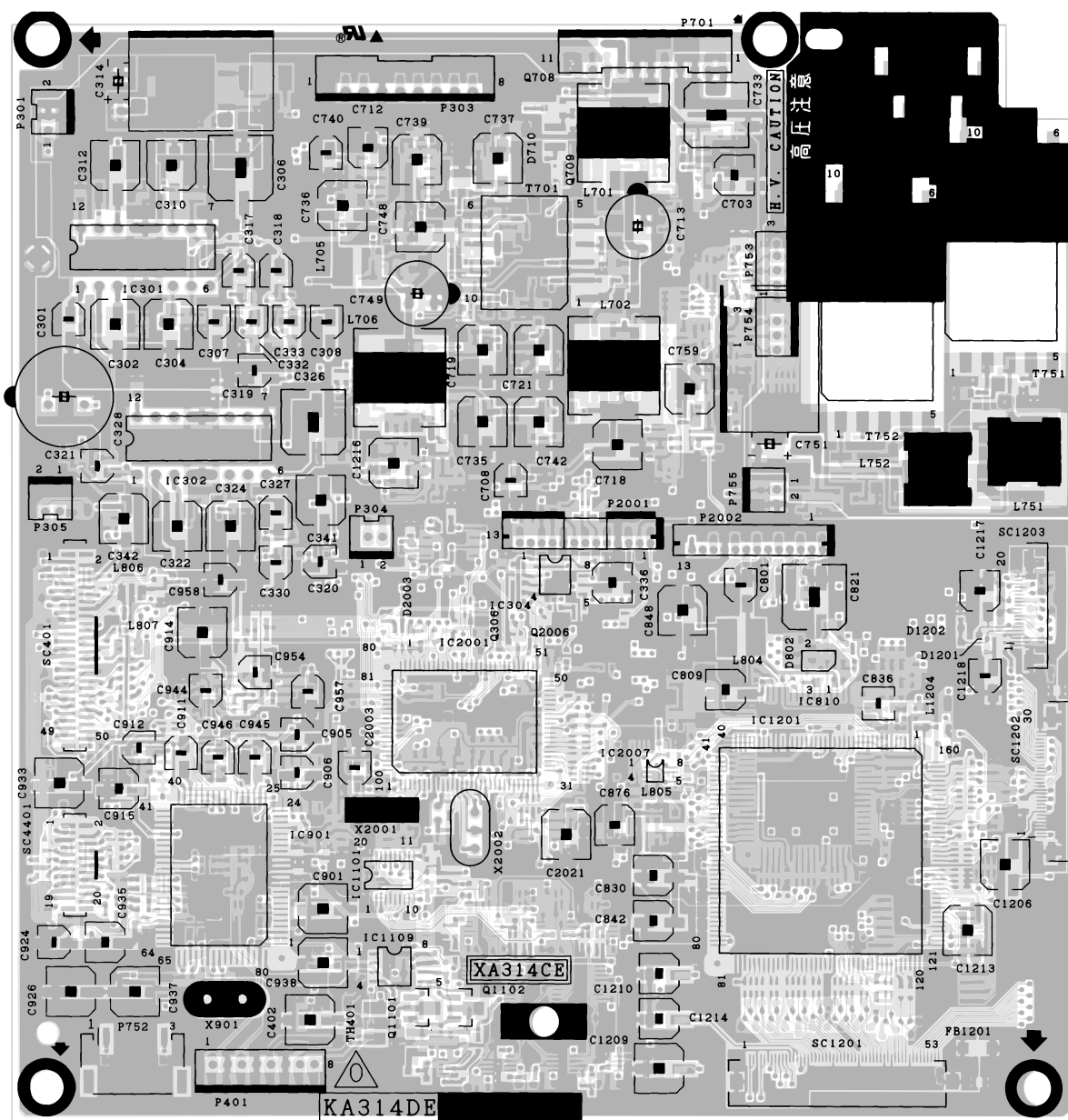
MAIN2



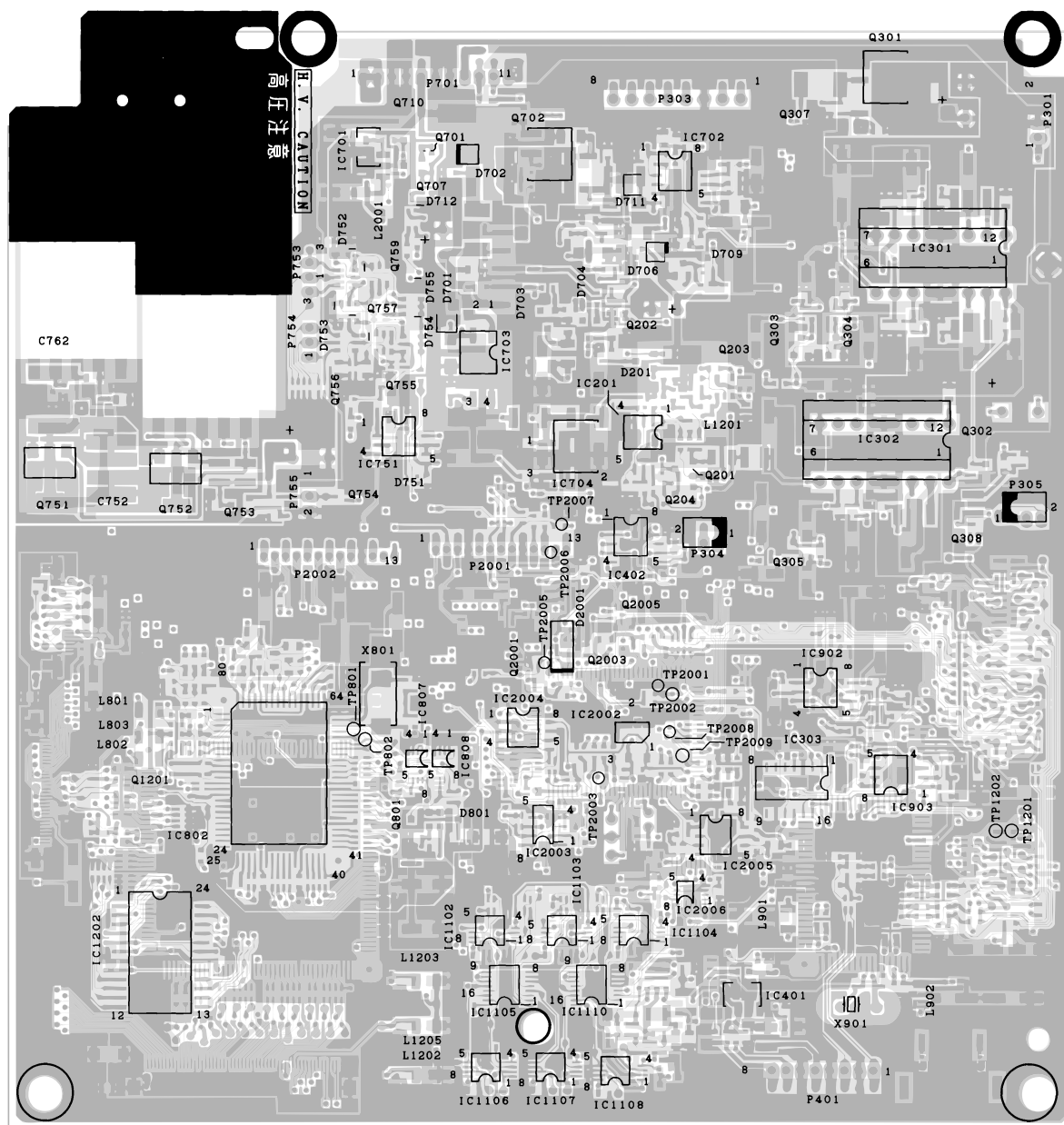
TERMINAL Unit



PRINTED WIRING BOARD ASSEMBLIES



MAIN Unit (Side-A)



MAIN Unit (Side-B)





33

H

G

F

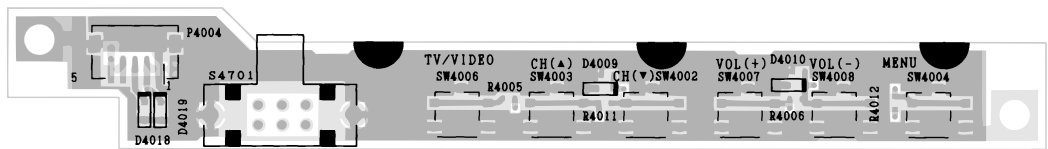
E

D

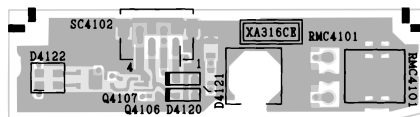
C

B

A



OPERATION Unit (Wiring Side)



R/C RECEIVER Unit (Wiring Side)

1

2

3

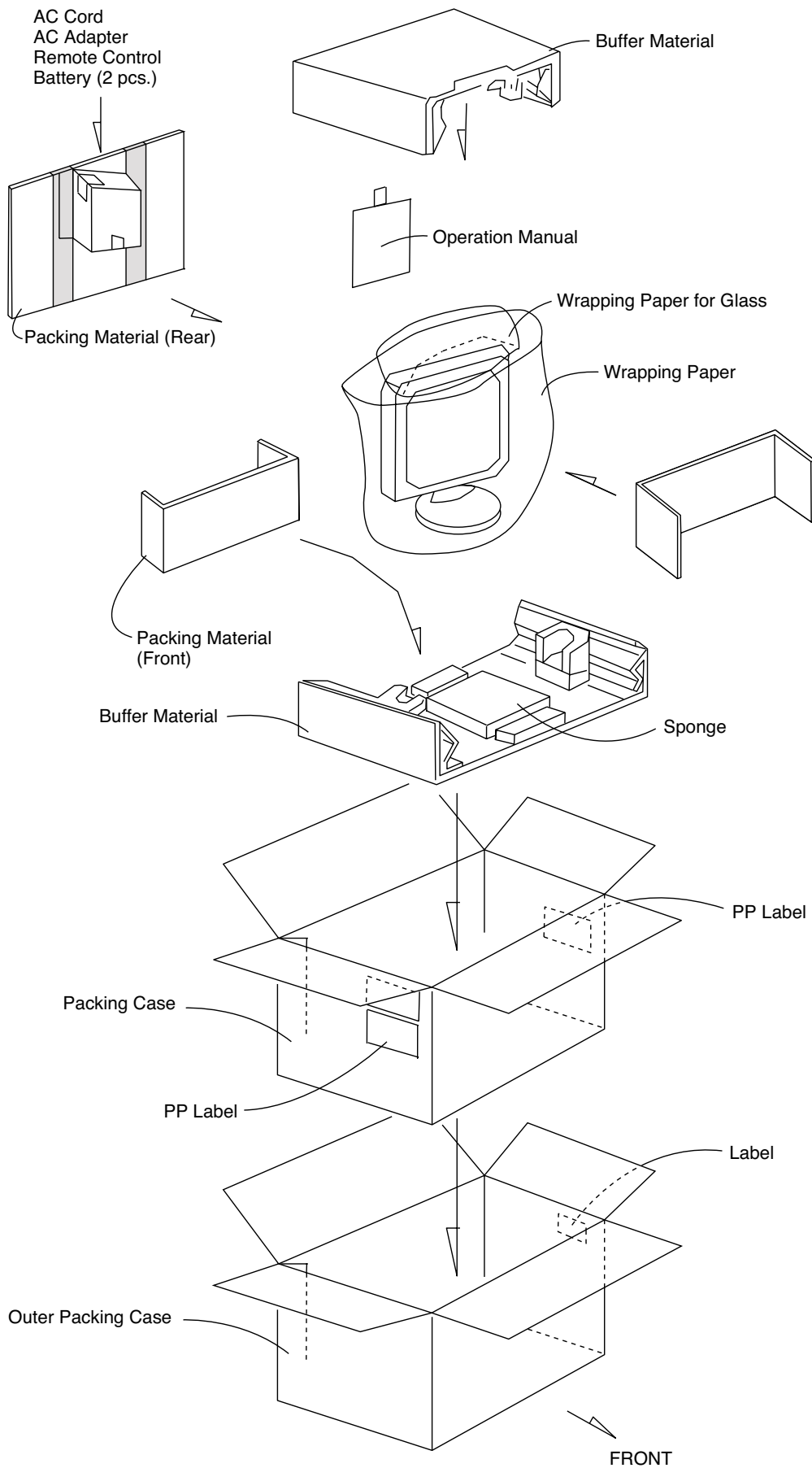
4

5

	1	2	3	4	5	6
--	---	---	---	---	---	---



PACKING OF THE SET

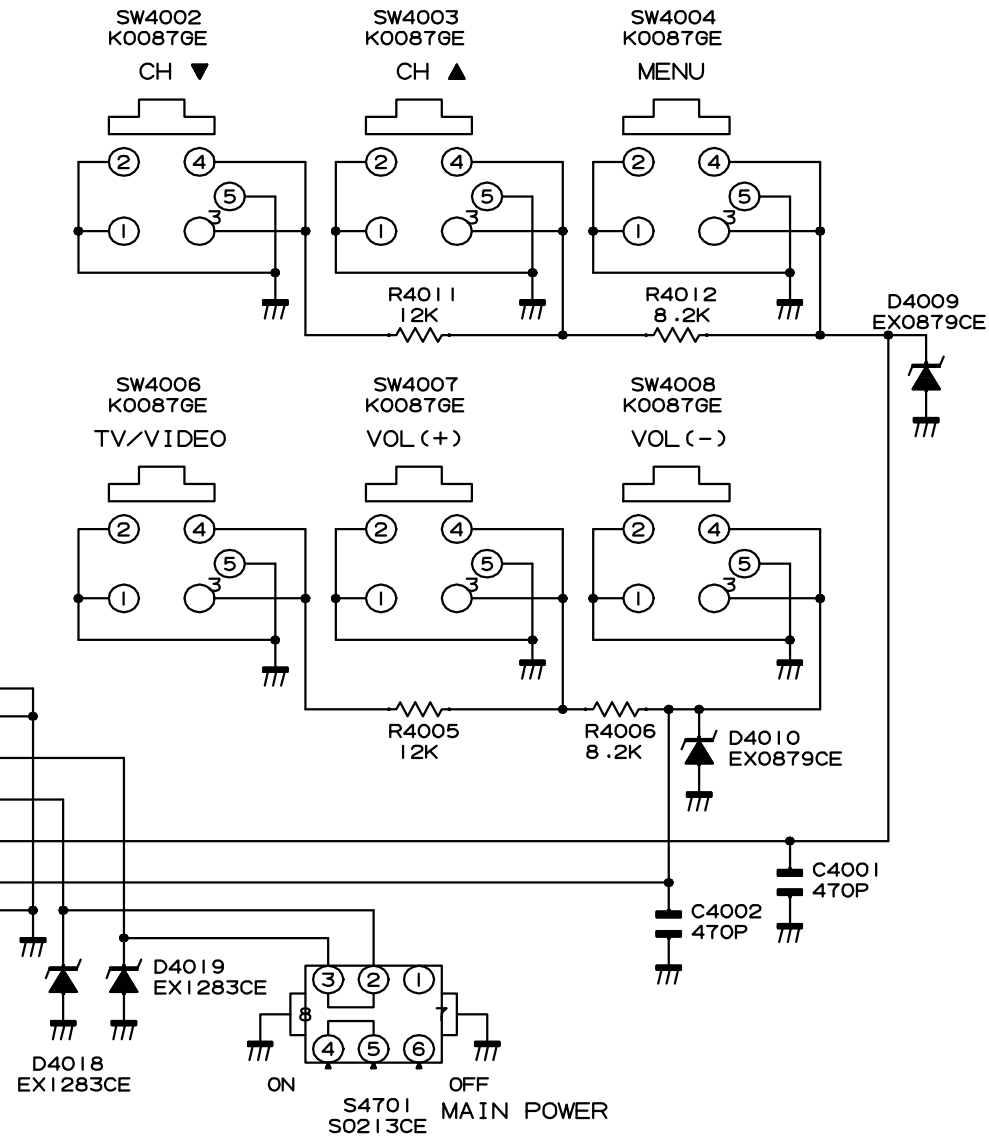


LC15A2L L15
LC15A2E 15

スイッチ

(2000.10.11)

P4004 N0564TA		
	GND	1
	POW2	2
	POW1	3
	KEY1	4
	KEY2	5



DUNTKA315DE01
(QPWBSA315CEZZ)

LC15A2L
LC15A2E

LC20A2E

R/C基板

(2000.10.11)

SC4102 N0464TA			
		I REM	1
		+5V	2
		POW	3
		GND	4

D4120
EX1271CE

D4121
EX1271CE

R4187
330

R4188
1K

D4122
PX0368CE

R4189
4.7K

Q4106
C144EE

Q4107
UMG4

RMC4101
0239CEZZ

R4190
100

C4120
1u
16V

DUNTKA316DE01
(QPWBSA316CEZZ)

